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SOME FACTS CONCERNING COMPETITION
BETWEEN APPLES AND OTHER FRUITS AT RETAIL,
NEW YORK CITY, AUGUST 1939

Preliminary Report

By
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and
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COOPERATIVE RESEARCH AND SERVICE DIVISION

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SOME FACTS CONCERNING COMPETITION BETWEEN
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NEW YORK CITY, AUGUST 1939

by

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Prices received by apple growers have been low during recent years and as a result, the financial condition of growers has been adversely affected in all important apple producing areas. In view of this situation, and at the urgent request of farmers' cooperative associations and other farmers' organizations, a study of demand for and sales of apples and competing fruits through retail channels was begun during the summer of 1938 by the Cooperative Research and Service Division of the Farm Credit Administration, and the New York State College of Agriculture, at Cornell University. A preliminary report, published in August 1939, 1/, covered the 1937-38 season. This research work indicated a need for further study to be conducted on a seasonal basis. The survey was, therefore, continued to cover three periods during the 1939-40 season.

As in the previous survey, the general purpose of this undertaking has been to analyze competition between apples and other fruits and to obtain information on some of the factors that affect retailer (and indirectly consumer) demand for apples and other fruits. An accurate knowledge of retailer performance would seem to be a basic requirement for cooperative associations and others developing practical programs for improving marketing methods and practices.

Note. - The authors express grateful appreciation to the chain-store systems and the independent retailers in New York City whose wholehearted support and assistance made this study possible.

1/ Rasmussen, M. P., and Quitslund, F. A., "Some Facts Concerning Competition Between Apples and Other Fruits at Retail, New York City," F.C.A. Misc. Report No. 19, 66 pp. 1939 (mimeo.).

In the New York metropolitan area, most of the fresh and processed fruits used in homes are obtained at neighborhood retail food outlets. It has been assumed that customers make their wants known to retailers by selecting, from the stock offered for sale, those items for which they are able and willing to pay. This close relationship between consumers and retailers should make it possible to measure consumer performance to some degree by studying retail outlets and what they sell.

This report covers actual weekly sales of apples and other fruits through 1,543 retail outlets of various kinds during August, 1939. It is the first of a series of three preliminary reports dealing with seasonal competition between apples and other fruits at retail in New York City during the 1939-40 season. The second report will cover sales during November, 1939; and the third report, sales during March, 1940.

SOURCE OF DATA

This preliminary report is based on data obtained in New York City during August 1939 from 413 independent fruit and vegetable stores, 406 independent grocery stores, 317 pushcart operators, 264 chain grocery stores, 75 wagon or motortruck hucksters, and 63 meat markets. The sampling of retail outlets was done so as to obtain a cross-section of retail fruit outlets in areas representing each of the various family income levels in the four large boroughs. The following procedure was used:

- (1) Using the 1930 census tract median rental maps prepared for the New York City Real Property Inventory, 30 residential areas, each 10 census tracts, or approximately 100 blocks in size, were selected. These areas were selected so that all census tracts within each area would have the same median rental within the limits shown in footnote 2 of table 5, and so that the sample would have about the same proportion of the population within each income (rental) grouping as existed for the city.
- (2) A complete listing of retail food outlets doing business in these 30 areas was made by traveling every street in the areas.
- (3) The listings were classified as to type of business and proportional quotas were established for each area from those that sold fruits and vegetables.
- (4) Survey records were obtained approximately in accordance with the quotas for each area.

Changes in population have unquestionably occurred since 1930. An effort is being made to obtain reliable data on the number of families in the various income areas. When this information is obtained, the sales volumes by outlets in the various income areas can be converted to sales per family and per capita. This has not been done in the report. Sales by the retail fruit outlets are on a per outlet basis and do not directly reflect differences in per capita consumption.

Only those retail outlets were included in this survey which handled fruits and vegetables normally during the year. This fact should be borne in mind in interpreting data throughout the report.

It should also be kept in mind continually that volume data in this report are based on a week's sales during August 1939 by each of the retail outlets. The data were obtained throughout the month so data for individual outlets do not cover the same week. It should be recognized that conditions in the retailing of fresh fruit change from time to time, and that there are great differences between the various seasons of the year. Therefore, in many cases tentative conclusions are all that these tabulations can justify. For example, on the question of margins, it is known that retail prices change slowly compared to wholesale or jobbing prices, and as a result, retail margins tend to fluctuate inversely with changes in jobbing prices. It is also known that jobbing prices of the various fruits do not move together. Such factors as these can be given more consideration when the findings during August and November of 1939, and March of 1940 are compared in a later report. In the meantime, readers are asked to make allowance for what might amount to temporary relationships.

In addition, the reader is asked to have in mind that the choice of sorting factors does not in all cases imply cause and effect relationships. For example, in many cases the tables were designed to merely compare the sales results for various identifiable groups of fruit outlets. Subsequent reports will attempt to go further into the reasons for the sales results being what they were.

Types of Retail Outlets for Fruits and Vegetables

The number of meat markets which handle fruits and vegetables seem to be relatively small. However, of the outlets included in this survey, meat markets ranked first in dollar sales of fruits and vegetables per outlet (\$261 weekly); independent fruit and vegetable stores were second (\$228 weekly); chain grocery stores third (\$157 weekly); hucksters fourth (\$133 weekly); pushcart operators fifth (\$104 weekly); and independent grocery stores lowest (\$102 weekly); (see table 1). It will be noted that fruit and vegetable sales made up only 14 percent of all chain grocery business; 21 percent of that of independent groceries, and 37 percent of that

of the meat markets handling fruits and vegetables. Almost all of the business of the independent fruit and vegetable stores, hucksters and pushcart operators consisted of fruits and vegetables.

QUANTITIES OF FRESH FRUIT HANDLED WEEKLY

Data were obtained concerning sales of all important kinds of fruits which were considered to be direct or indirect competitors of apples, during August, 1939. The fruit handled in largest quantity per outlet was peaches (368 pounds per week or slightly more than one-fifth of the total tonnage); oranges ranked a close second (362 pounds or about 20 percent); cantaloupes third (231 pounds or about 13 percent); watermelons fourth (171 pounds or

Table 1. - Relation of Weekly Dollar Sales of Fruits and Vegetables to Gross Sales of All Commodities, as Reported by 1,513 ^{1/} Retail Outlets, New York City, August 1939

| Type of retail outlet ^{2/} | Number of outlets reporting | Weekly gross dollar sales per outlet | | Proportion fruit and vegetable sales were of all commodity sales |
|-------------------------------------|-----------------------------|--------------------------------------|-----------------------|--|
| | | All commodities | Fruits and vegetables | |
| | | Dollars | Dollars | Percent |
| Grocery stores: | | | | |
| Chain | 250 | 1,155 | 157 | 14 |
| Independent | 399 | 479 | 102 | 21 |
| Meat markets | 63 | 710 | 261 | 37 |
| Fruit and vegetable stores | 410 | 247 | 228 | 92 |
| Wagon or motor hucksters | 75 | 138 | 138 | 100 |
| Pushcart operators | 316 | 104 | 104 | 100 |

^{1/} Although 1,543 retail outlets were included in this survey, data concerning weekly dollar sales were made available for only 1,513.

^{2/} The classification of individual outlets was based partially upon the apparent importance of the various kinds of commodities handled and partially on the method of operation. For example, all outlets handling an important volume of groceries were classified as grocery stores even though many handled meats. Also a few of those classified as meat markets, sold some items other than meats and fruits and vegetables.

Source: Data obtained from chain stores and independent retailers in New York City.

about 9 percent); apples fifth (144 pounds or about 8 percent); pears sixth (142 pounds or about 8 percent); and bananas seventh (139 pounds or about 8 percent); (table 2). There was no obvious

relationship between the total quantities of the various fruits handled and the average realized retail price ^{2/}. For example, the average realized retail price of peaches was 33 percent higher than that of eastern apples, but the quantity of peaches disposed of was 175 percent greater than the quantity of apples sold. The average spoilage on peaches was 7.8 pounds per hundredweight purchased, and on eastern apples only 3.8 pounds. The gross retail margin averaged 47 percent on eastern apples compared with 23 percent on peaches. But more eastern apples were sold, at a gross margin of 47 percent, than were bananas, at a gross margin of 14 percent. Spoilage on peaches and bananas was approximately the same (i.e., about 8 percent). Bananas were six-tenths of a cent cheaper per pound than peaches. Despite the similarity in spoilage and the lower retail price for bananas, more than twice as many peaches were sold per retail outlet, even though the gross retail margin on peaches was 23 percent compared with 14 percent on bananas. The average price realized by these retailers for all fruits was 4.9 cents per pound. The average gross retail margin was 22 percent of the realized retail price, and the average spoilage was 6.4 pounds per hundredweight.

Sales Volume of Different Outlets for Fresh Fruit

As might be expected, there were relatively wide differences in the sales volumes of the various types of retail fruit outlets. The quantity of the selected fruits sold weekly by all 1,543 outlets averaged 1,823 pounds per outlet.

^{2/} "Realized retail price": Since spoilage is inevitable in handling fruits and vegetables, and retailers rarely sell as many pounds per unit as they buy, actual price charged consumer per pound is not an accurate statement of retail prices from the point of view of the retailer. For example, a grocer buys 100 pounds of apples at a cost of \$2.00. Spoilage amounts to about 4 percent, so he actually sold 96 pounds and not 100 pounds. Actual price per pound to consumer was 3-3/4 cents per pound x 96 pounds sold - \$3.60 realized retail price per 100 pounds purchased or 3.6 cents per pound. Difference between cost of \$2.00 per 100 lbs. and realized selling price of \$3.60 per 100 lbs. - \$1.60 (or 1.6 cents gross margin per pound purchased.) Percentage gross margin was calculated in above case by dividing 1.6 cents gross margin per pound purchased by 3.6 cents per pound realized retail price - 44 percent gross margin. Throughout this report the terms "realized retail price" and "gross retail margin" are used to indicate above illustrated relationships. Spoilage rates given by each retailer were used on that particular retailer's items.

Table 2.- Quantities of Leading Fruits Sold Weekly, Average Realized Retail Prices, and Gross Margins, as Reported by 1,543 Retail Outlets, New York City, August, 1939

| Fruit | Quantity sold weekly by all outlets | | | Realized re- tail price per pound 2/ | Gross retail margin | | Spoilage per 100 pounds |
|---------------------|-------------------------------------|-----------------------|------------------------|--|---------------------|---|-------------------------------|
| | Total | Average per outlet | Percentage of total | | Per pound | Percentage of realized re- tail price | |
| | Pounds | Pounds | Percent | Cents | Cents | Percent | Pounds |
| Apples: | | | | | | | |
| Eastern | 206,444 | 134 | 7.4 | 3.6 | 1.7 | 47 | 3.8 |
| Western | 15,596 | 10 | 0.5 | 6.5 | 2.4 | 37 | 5.3 |
| Total | 222,040 | 144 | 7.9 | 5.8 | 1.8 | 47 | 3.9 |
| Oranges: | | | | | | | |
| California | 442,505 | 287 | 15.8 | 6.8 | 1.4 | 21 | 3.2 |
| Florida | 115,949 | 75 | 4.1 | 3.7 | 0.6 | 16 | 11.7 |
| Total | 558,354 | 362 | 19.9 | 6.2 | 1.3 | 21 | 5.0 |
| Grapefruit | 65,728 | 43 | 2.4 | 4.6 | 1.3 | 28 | 7.0 |
| Peppars | 214,944 | 139 | 7.6 | 4.2 | 0.6 | 14 | 8.0 |
| Peaches | 567,431 | 363 | 20.2 | 4.8 | 1.1 | 23 | 7.8 |
| Pears: | | | | | | | |
| Western | 194,595 | 126 | 6.9 | 7.6 | 1.5 | 20 | 4.2 |
| Eastern | 21,954 | 16 | 0.9 | 3.9 | 1.3 | 33 | 2.0 |
| Total | 216,549 | 142 | 7.8 | 7.2 | 1.5 | 21 | 4.0 |
| Grapes: | | | | | | | |
| Western | 159,424 | 105 | 5.6 | 7.3 | 1.6 | 22 | 6.2 |
| Eastern | 474 | 1/ | - | 8.7 | 3.7 | 43 | 3.4 |
| Total | 159,898 | 103 | 5.6 | 7.3 | 1.6 | 22 | 6.1 |
| Cantaloupes | 356,931 | 231 | 12.7 | 3.0 | 0.7 | 23 | 11.0 |
| Honeydew Melons | 149,116 | 97 | 5.3 | 6.3 | 1.3 | 21 | 5.2 |
| Honeyball Melons | 31,716 | 21 | 1.1 | 6.0 | 1.4 | 23 | 8.5 |
| Other Melons | 3,320 | 2 | 0.1 | 6.6 | 1.3 | 20 | 10.5 |
| Watermelons | 263,621 | 171 | 9.4 | 1.8 | 0.5 | 28 | 3.3 |
| Total or average | 2,812,638 | 1,823 | 100.0 | 4.9 | 1.1 | 22 | 6.4 |

1/ Less than 1 pound.

2/ See footnote at bottom of page 5.

Source: Data obtained from chain stores and independent retailers in New York City.

On the basis of total tonnage of 11 different fresh fruits sold weekly per retail outlet, wagon or motor hucksters led with 3,416 pounds per week, and meat markets held second place with 2,663 pounds. Chain grocery stores (with 2,090 pounds), and independent fruit and vegetable stores (with 2,071 pounds) were close competitors for third place. Pushcart operators ranked fifth in volume with 1,307 pounds, and independent grocery stores were lowest with 980 pounds (table 3).

On the basis of sales of individual fruits, however, the various types of retail outlets did not rank in the same order as in the case of total tonnage. During August, wagon or motor hucksters were clearly the leaders in selling watermelons, peaches, and apples; and were equally as important as meat markets in handling cantaloupes (table 3). Chain grocery stores led in the sale of oranges, with meat markets a close second, fruit and vegetable stores third, and pushcart operators fourth. Meat markets led in per outlet sales of bananas, but both fruit and vegetable stores and chain grocery stores sold large quantities of this fruit. Meat markets also led in selling grapes, but pushcart operators were a close second, and fruit and vegetable stands were not far behind. Meat markets ranked first in the sale of honeydew melons with chain grocery stores and independent fruit and vegetable stores of about equal importance. Since independent grocery stores are probably the most numerous type of retail outlet in New York City, it seems important to note that during August at least, sales of apples, peaches, grapes, cantaloupes, and honeydew melons were lowest in such stores, and that sales of practically every other fruit in independent grocery stores were below the average for all outlets. Chain grocery stores were comparatively weak in sales of western apples and pears. Pushcart operators sold relatively few watermelons or western apples. On the other hand, wagon or motor hucksters sold large numbers of watermelons, but disposed of relatively few grapefruit, western apples, and Florida oranges. These data can, together with similar data to be published November 1939 and March 1940, be of use to the sales promotion departments of cooperative marketing organizations that attempt to strengthen apparent weak spots in the distribution of any of these fruits, or wish to concentrate attention on the outlets which seem to be the largest handlers of their commodity.

Proportion of Retail Outlets Handling Each Fruit

It is obvious that a retail outlet cannot be a helpful factor in the distribution of a fruit unless it carries the fruit in stock. It follows, therefore, that the failure of large numbers of retail outlets to stock a fruit may be one of the major reasons why sales results on such a fruit are unsatisfactory to growers. If the "bottlenecks" can be discovered, it seems likely that the sales promotion departments of cooperative associations and others can,

Table 3.- Sales Volumes of Selected Fruits for Different Types of Retail Outlets, as Reported by 1,543 Retailers, New York City, August, 1939

| Fruit | Quantity sold weekly per retail outlet 2/ | | | | | | Total or average all 1,543 outlets |
|---------------------|---|------------------------------------|-------------------------|---------------------------------|--|--|------------------------------------|
| | 413 fruit and vegetable stores Pounds | 406 inde- pendents Pounds | 264 chains Pounds | 63 meat markets Pounds | 317 pushcart operators Pounds | 75 wagon or motor hucksters Pounds | |
| Apples: | | | | | | | |
| Eastern | 142 | 76 | 95 | 189 | 177 | 311 | 134 |
| Western | 18 | 7 | 5 | 20 | 7 | 2 | 10 |
| Oranges: | | | | | | | |
| California | 325 | 193 | 451 | 440 | 210 | 194 | 237 |
| Florida | 86 | 33 | 59 | 39 | 152 | 5 | 75 |
| Grapefruit | 63 | 29 | 29 | 61 | 48 | 11 | 43 |
| Bananas | 198 | 99 | 152 | 297 | 88 | 73 | 139 |
| Peaches | 369 | 173 | 417 | 450 | 473 | 703 | 368 |
| Pears: | | | | | | | |
| Eastern | 18 | 8 | 4 | 20 | 29 | 35 | 16 |
| Western | 179 | 68 | 50 | 191 | 188 | 95 | 126 |
| Grapes: | | | | | | | |
| Eastern | --- | --- | 1/ | --- | --- | 5 | 1/ |
| Western | 131 | 44 | 92 | 161 | 144 | 88 | 103 |
| Cantaloupes | 248 | 117 | 312 | 468 | 185 | 469 | 231 |
| Honeydew melons | 123 | 56 | 127 | 145 | 83 | 83 | 97 |
| Honeyball melons | 40 | 11 | 10 | 30 | 16 | 12 | 21 |
| Other melons | 3 | 1 | 6 | 2 | --- | --- | 2 |
| Watermelons | 128 | 65 | 281 | 155 | 2 | 1325 | 171 |
| Total, above fruits | 2071 | 980 | 2090 | 2668 | 1807 | 3416 | 1823 |

1/ Less than 1 pound.

2/ Averages are based on the total number of outlets whether or not all handled the item.

Source: Data obtained from chain stores and independent retailers in New York City.

if they try, give supplementary promotional aids and attention which will result in a more nearly adequate retail merchandising situation.

Analysis of the commodities sold in these 1,543 retail outlets during August showed wide divergences in coverage for each commodity by the various retail outlets as well as by outlets of the same type. Sixty percent of these outlets handled eastern apples, but only 15 percent handled western apples (table 4). Similarly 78 percent handled California oranges, but only 20 percent handled Florida oranges. Peaches were handled by a larger proportion of outlets (82 percent) than any other one fruit, and eastern grapes by the smallest proportion. No one fruit was handled by all of the 1,543 retail outlets included in this study. Less than one-third of the outlets handled grapefruit, 31 percent handled watermelons, and eastern pears, and honeyball melons were handled, respectively, by only 13 percent. Seasonal changes in coverage will be shown by later reports for November and March.

There were equally wide differences in the practices of each type of retail outlet. For example, 83 percent of the meat markets and 77 percent of the fruit and vegetable stands handled eastern apples in contrast with 54 percent of the independent grocers and 37 percent of the pushcart operators (table 4). Only 11 percent of the chain groceries stocked western apples compared with 27 percent of the fruit stands and 24 percent of the meat markets. Almost nine-tenths of the grocery stores, meat markets, and fruit stands handled California oranges but only about 1/3 of the pushcart operators and less than half of the wagon hucksters. Western pears were handled by 93 percent of the fruit stands, but by only 43 percent of the chain grocery stores. On the other hand, 71 percent of the chain groceries handled watermelons, compared with 36 percent of the fruit and vegetable stores and 23 percent of the independent groceries.

An important part of the variations in quantity of each fruit handled weekly per outlet among and between types of retail outlet appears to have resulted from differences in average family incomes in the neighborhoods in which the retail outlets were located 3/. The quantity of eastern apples handled per outlet in all income areas ranged from none to over 400 pounds weekly. Large volume outlets (i.e., handling 400 pounds or more per week) were found in all 4 income areas in approximately the same ratio, (table 5). The proportion of outlets which did not handle eastern apples was far greater in the lowest income areas (68 percent) than in the 2 highest income areas (about 20 percent). In addition, in all income areas, outlets handling relatively small quantities weekly were most numerous, i.e., 37 percent of the outlets in the highest income areas, 32 to 35 percent in medium areas, and 15 percent in the lowest income

3/ For explanation of income areas, see footnote to table 5.

Table 4.- Proportion of Stores Surveyed Handling Specified Fruits, as Reported by 1,543 Retail Outlets, New York City, August, 1939

| Fruit | Proportion of each type of outlet handling specified fruit | | | | | |
|----------------------|--|---------------------------------|-----------------------|----------------------------|-----------------------------------|--|
| | 418 fruit and vegetable stores Percent | Grocery stores | | 63 meat markets Percent | 317 pushcart operators Percent | 75 wagon or motor hucksters Percent |
| | | 406 independent-ents Percent | 264 chains Percent | | | |
| Apples: | | | | | | |
| Eastern | 77 | 54 | 69 | 83 | 37 | 55 |
| Western | 27 | 14 | 11 | 24 | 3 | 1 |
| Oranges: | | | | | | |
| California | 94 | 87 | 92 | 92 | 36 | 44 |
| Florida | 28 | 17 | 23 | 19 | 15 | 3 |
| Grapefruit | 54 | 30 | 25 | 52 | 14 | 7 |
| Bananas | 81 | 65 | 84 | 79 | 6 | 12 |
| Peaches | 96 | 77 | 96 | 97 | 57 | 79 |
| Pears: | | | | | | |
| Eastern | 24 | 11 | 3 | 16 | 7 | 12 |
| Western | 93 | 56 | 43 | 87 | 44 | 32 |
| Grapes: | | | | | | |
| Eastern | -- | -- | 2 | -- | -- | 1 |
| Western | 86 | 46 | 57 | 73 | 43 | 39 |
| Cantaloupes | 78 | 54 | 84 | 86 | 26 | 55 |
| Honeydew melons | 77 | 44 | 66 | 73 | 18 | 29 |
| Honeyball melons | 25 | 10 | 7 | 21 | 5 | 5 |
| Other melons | 3 | 2 | 6 | 3 | -- | -- |
| Watermelons | 36 | 23 | 71 | 41 | 1/ | 21 |
| All | | | | | | |
| 1,543 retail outlets | | | | | | |
| Percent | | | | | | |

1/ Less than 1 percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 5.- Apples: RELATION OF PHYSICAL VOLUME SOLD WEEKLY TO NUMBER AND PROPORTION OF RETAIL OUTLETS, BY INCOME AREAS, NEW YORK CITY, AUGUST 1939

| Range in quantity sold weekly per store | Proportion of all outlets 1/ surveyed in each income group 2/ | | | Proportion of tonnage per income area sold by outlets in area 2/ | | | Distribution of outlets, which sold apples, in each income area 2/ | | | |
|---|---|-------------------|--------------------|--|------------|-------------------|--|-------------|------------|-------------------|
| | Low income | Medium-low income | Medium-high income | High income | Low income | Medium-low income | Medium-high income | High income | Low income | Medium-low income |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Eastern Apples: | | | | | | | | | | |
| None | 68 | 40 | 21 | 19 | | | | | | |
| Less than 50 | 10 | 19 | 18 | 17 | | | | | | |
| 50 - 99 | 5 | 14 | 14 | 20 | 5 | 4 | 5 | 12 | 32 | 22 |
| 100 - 149 | 3 | 8 | 14 | 15 | 11 | 8 | 8 | 13 | 16 | 18 |
| 150 - 199 | 1 | 4 | 7 | 8 | 4 | 10 | 12 | 10 | 9 | 18 |
| 200 - 299 | 5 | 6 | 10 | 9 | 3 | 7 | 8 | 10 | 4 | 9 |
| 300 - 399 | 1 | 3 | 6 | 4 | 11 | 12 | 16 | 14 | 14 | 13 |
| 400 or more | 7 | 6 | 10 | 8 | 2 | 9 | 12 | 8 | 2 | 7 |
| | | | | | 70 | 45 | 40 | 38 | 23 | 13 |
| Western Apples: | | | | | | | | | | |
| None | 93 | 86 | 80 | 81 | | | | | | |
| Less than 50 | 4 | 11 | 14 | 13 | 16 | 45 | 43 | 39 | 68 | 70 |
| 50 - 99 | 1 | 2 | 4 | 3 | 8 | 19 | 29 | 22 | 11 | 19 |
| 100 - 149 | 1 | 1 | 1 | 2 | 9 | 14 | 14 | 19 | 9 | 6 |
| 150 - 199 | - | - | 1 | 1 | - | - | 14 | 11 | - | 5 |
| 200 - 299 | 3/ | 3/ | - | 3/ | 5 | - | - | 9 | 3 | - |
| 300 or more | 1 | | - | - | 62 | 22 | - | - | 9 | - |

1/ As previously stated, only outlets which normally handled some fruits and vegetables were included in this survey.

2/ The income group in which each outlet has been placed was determined by the average rentals paid per family in the neighborhood in which the outlet is located. These rentals are from the U.S. Census of 1930 and are median rentals for each census tract. Thirty relatively large areas or neighborhoods, each 10 census tracts (or about 100 square blocks) in size, with all of the 10 census tracts having about the same median rentals, were chosen. Therefore, when a store is placed in a certain income group, it means that median rentals paid by families both in the census tract in which the store is located and in the general neighborhood are within the rental range on which that income group is based. The ranges in median rentals per family on which each income group is based are as follows:

Low income group - median rentals less than \$35 per month
 Medium-low income group - median rentals \$35 to \$49 per month
 Medium-high income group - median rentals \$50 to \$64 per month
 High income group - median rental \$65 or more per month

3/ Less than 1 percent.

Source: Data obtained from chain stores and independent retailers in New York City.

areas sold less than 2 bushels of apples per outlet weekly. Conversely, there seems to have been a high degree of concentration of volume of business in relatively few outlets in all areas, although large volume outlets played a much more dominant role in the lower income areas than in the higher income areas. For example, outlets that sold 400 or more pounds of eastern apples amounted to only 7 percent of all outlets but sold 70 percent of the apples sold in low income areas. In the highest income areas such outlets made up 8 percent of the outlets but sold only 38 percent of the tonnage. Certain outlets apparently specialized in individual fruits to a greater extent in the low income areas than did outlets in higher income areas.

To sales departments of cooperative associations as well as growers, it seems important to note that of the 930 out of 1,543 outlets, (which actually handled eastern apples during August), 40 percent or more in each of the four income areas handled less than 2 bushels per week (table 5).

Space does not permit discussion of other fruits at this point, but similar data concerning California and Florida oranges will be found in table 6, bananas and peaches in table 7, and cantaloupes and watermelons in table 8. It is obvious that no one fruit had what might be termed "complete coverage." These data seem to indicate that there is a promising field for cooperative associations and others who wish to plug the gaps and increase retail distribution.

QUANTITIES OF CANNED FRUITS AND JUICES HANDLED WEEKLY

The factors of convenience and price have made canned fruits and canned juices, in part at least, direct competitors of the fresh fruits. The exact degree of substitution has not been measured. In many instances, canned fruits and juices are used when fresh fruits would not be used. Also no satisfactory basis for volume comparisons of fresh fruits and canned goods has been found since the latter are ready for consumption when the can is opened, whereas there is appreciable spoilage and waste in the case of fresh fruits. These difficulties should be borne in mind in interpreting the following data, where fresh fruits are compared, pound for pound, with the net contents of cases of canned fruits and juices.

Fresh Fruit Outlets That Handled Canned Fruits and Juices

This study included only outlets which handled fresh fruits and as a result, does not give a complete picture of canned fruit and juice sales in comparison to fresh fruit. It has been previously shown that these 1,543 retail outlets handled 2,812,638 pounds of fresh fruit weekly in August. In addition, these stores sold 2,575 cases of 5 kinds of canned fruit (or 100,215 pounds), and 7,542 cases of 6 kinds of fruit juices (or 217,879 pounds) (table 9). Roughly

Table 6.-- Oranges: RELATION OF PHYSICAL VOLUME SOLD WEEKLY TO NUMBER AND PROPORTION OF RETAIL OUTLETS, BY INCOME AREAS, NEW YORK CITY, AUGUST, 1939

| Range in quantity sold weekly per store | Proportion of all outlets surveyed in each income group 2/ | | | | Proportion of tonnage per income area sold by outlets in area 2/ | | | | Distribution of outlets, which sold oranges, in each income area 2/ | | | |
|---|--|----------------------------|---------------------------|----------------------------|--|----------------------------|---------------------------|----------------------------|---|----------------------------|---------------------------|----------------------------|
| | Low income Percent | | Medium-low income Percent | | Low income Percent | | Medium-low income Percent | | Low income Percent | | Medium-low income Percent | |
| | High income Percent | Medium-high income Percent | High income Percent | Medium-high income Percent | High income Percent | Medium-high income Percent | High income Percent | Medium-high income Percent | High income Percent | Medium-high income Percent | High income Percent | Medium-high income Percent |
| California Oranges: | | | | | | | | | | | | |
| None | 46 | 20 | 13 | 4 | | | | | | | | |
| Less than 100 | 20 | 24 | 17 | 5 | 7 | 7 | 4 | 1 | 38 | 30 | 19 | 5 |
| 100 - 199 | 12 | 20 | 22 | 11 | 11 | 13 | 11 | 3 | 24 | 36 | 25 | 12 |
| 200 - 299 | 8 | 20 | 21 | 24 | 12 | 21 | 17 | 11 | 15 | 25 | 24 | 25 |
| 300 - 399 | 4 | 4 | 7 | 9 | 8 | 5 | 8 | 6 | 7 | 4 | 8 | 10 |
| 400 - 499 | 4 | 4 | 7 | 12 | 10 | 7 | 11 | 11 | 7 | 4 | 9 | 13 |
| 500 - 999 | 3 | 4 | 7 | 22 | 11 | 13 | 17 | 30 | 4 | 6 | 8 | 22 |
| 1,000 or more | 3 | 4 | 6 | 13 | 41 | 34 | 32 | 33 | 5 | 5 | 7 | 13 |
| Florida Oranges: | | | | | | | | | | | | |
| None | 80 | 70 | 84 | 86 | | | | | | | | |
| Less than 100 | 8 | 12 | 6 | 5 | 8 | 7 | 10 | 12 | 42 | 39 | 38 | 38 |
| 100 - 199 | 3 | 4 | 4 | 3 | 5 | 5 | 13 | 15 | 12 | 15 | 22 | 21 |
| 200 - 299 | 3 | 5 | 3 | 2 | 8 | 10 | 17 | 14 | 12 | 16 | 20 | 13 |
| 300 - 399 | 1 | 3 | 1 | 1 | 6 | 7 | 9 | 5 | 7 | 9 | 7 | 4 |
| 400 - 499 | 2 | 1 | 3 | 1 | 11 | 4 | 3 | 16 | 9 | 4 | 2 | 10 |
| 500 - 999 | 2 | 2 | 1 | 2 | 23 | 11 | 18 | 28 | 11 | 7 | 7 | 12 |
| 1,000 or more | 1 | 3 | 1 | 3 | 39 | 56 | 30 | 10 | 7 | 10 | 4 | 2 |

1/ As previously stated, only outlets which normally handled some fruits and vegetables were included in this survey.

2/ For explanation of income areas, see table 5.

3/ Less than one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 7.-- Bananas and Peaches: RELATION OF PHYSICAL VOLUME SOLD WEEKLY OF EACH FRUIT, TO NUMBER AND PROPORTION OF RETAIL OUTLETS, BY INCOME AREAS, NEW YORK CITY, AUGUST, 1939

| Range in quantity sold weekly per store | Proportion of all outlets/surveyed in each income group | | | | | | Proportion of tonnage per income area sold by outlets in each income area | | | | | | Distribution of outlets, which sold specified fruit, in each income area | | | | | |
|---|---|---------|---------------|---------|-------------|---------|---|---------|---------------|---------|-------------|---------|--|---------|---------------|---------|-------------|---------|
| | Low income | | Medium income | | High income | | Low income | | Medium income | | High income | | Low income | | Medium income | | High income | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Bananas: | | | | | | | | | | | | | | | | | | |
| None | 78 | 39 | 21 | 15 | | | | | | | | | | | | | | |
| Less than 50 | 2 | 2 | 3 | 5 | 1 | 3/5 | 1 | 7 | 1 | 1 | 1 | 3 | 7 | 27 | 4 | 6 | 21 | 6 |
| 50 - 99 | 6 | 16 | 14 | 18 | 6 | 7 | 5 | | | | | | | 26 | 18 | | | |
| 100 - 149 | 4 | 11 | 19 | 19 | 8 | | | | | | | | | 17 | 24 | | | |
| 150 - 199 | 3 | 11 | 13 | 19 | | | | | | | | | | 13 | 17 | | | |
| 200 - 299 | 3 | 8 | 10 | 9 | 12 | | | | | | | | | 13 | 13 | | | |
| 300 - 399 | 2 | 6 | 8 | 8 | 10 | | | | | | | | | 9 | 10 | | | |
| 400 - 699 | 1 | 3 | 8 | 5 | 11 | | | | | | | | | 6 | 10 | | | |
| 700 - 999 | - | 1 | 2 | 1 | - | | | | | | | | | 3 | 2 | | | |
| 1,000 - or more | 1 | 3 | 2 | 1 | 44 | | | | | | | | | 5 | 2 | | | |
| | | | | | | | | | | | | | | | | | | |
| Peaches: | | | | | | | | | | | | | | | | | | |
| None | 36 | 15 | 7 | 7 | | | | | | | | | | | | | | |
| Less than 50 | 11 | 12 | 9 | 3 | 2 | 1 | 1 | 3/5 | 1 | 3/5 | 3/5 | 17 | 14 | 17 | 9 | 3 | | |
| 50 - 99 | 8 | 12 | 14 | 7 | 2 | | | | | | | | | 13 | 16 | | | |
| 100 - 149 | 6 | 10 | 13 | 10 | 3 | | | | | | | | | 10 | 14 | | | |
| 150 - 199 | 4 | 8 | 8 | 9 | 2 | | | | | | | | | 6 | 8 | | | |
| 200 - 249 | 4 | 5 | 8 | 9 | 3 | | | | | | | | | 7 | 9 | | | |
| 250 - 299 | 4 | 6 | 12 | 13 | 3 | | | | | | | | | 6 | 7 | | | |
| 300 - 399 | 5 | 8 | 6 | 8 | 5 | | | | | | | | | 7 | 13 | | | |
| 400 - 699 | 7 | 8 | 11 | 19 | 12 | | | | | | | | | 10 | 6 | | | |
| 700 - 999 | 7 | 5 | 6 | 9 | 18 | | | | | | | | | 12 | 12 | | | |
| 1,000 - or more | 8 | 11 | 6 | 6 | 50 | | | | | | | | | 6 | 7 | | | |

1/ As previously stated, only outlets which normally handled some fruits and vegetables were included in this survey.

2/ For explanation of income areas, see table 5.

3/ Less than one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 8.-- Cantaloupes and Watermelons: RELATION OF PHYSICAL VOLUME SOLD WEEKLY OF EACH FRUIT, TO NUMBER AND PROPORTION OF RETAIL OUTLETS, BY INCOME AREAS, NEW YORK CITY, AUGUST, 1939

| Range in quantity sold weekly per store | Proportion of all outlets surveyed in each income group ^{2/} | | | | | | | | | | Distribution of outlets, which sold specified fruit, in each income area ^{2/} | | | | | | | | | |
|---|---|---------|-------------------|---------|--------------------|---------|-------------|---------|------------|---------|--|---------|--------------------|---------|-------------|---------|------------|---------|-------------------|---------|
| | Low income | | Medium-low income | | Medium-high income | | High income | | Low income | | Medium-low income | | Medium-high income | | High income | | Low income | | Medium-low income | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Cantaloupes: | | | | | | | | | | | | | | | | | | | | |
| None | 74 | 31 | 6 | 6 | 23 | 6 | 4 | 6 | 4 | 6 | 5 | 5 | 33 | 33 | 26 | 25 | | | | |
| Less than 100 | 9 | 22 | 24 | 23 | 23 | 9 | 7 | 9 | 7 | 9 | 12 | 10 | 20 | 23 | 28 | 24 | | | | |
| 100 - 199 | 5 | 16 | 26 | 26 | 25 | 16 | 14 | 16 | 14 | 16 | 19 | 22 | 22 | 23 | 23 | 27 | | | | |
| 200 - 399 | 6 | 16 | 22 | 22 | 25 | 9 | 9 | 9 | 9 | 9 | 14 | 17 | 8 | 7 | 11 | 12 | | | | |
| 400 - 599 | 2 | 5 | 10 | 10 | 11 | 8 | 6 | 8 | 6 | 8 | 9 | 7 | 4 | 4 | 4 | 4 | | | | |
| 600 - 799 | 1 | 3 | 4 | 4 | 4 | 2 | 9 | 2 | 9 | 2 | 5 | 7 | 4 | 1 | 2 | 3 | | | | |
| 800 - 999 | 1 | 1 | 2 | 2 | 3 | 50 | 51 | 50 | 51 | 50 | 36 | 32 | 9 | 9 | 6 | 5 | | | | |
| 1,000 or more | 2 | 6 | 6 | 5 | 5 | | | | | | | | | | | | | | | |
| Watermelons: | | | | | | | | | | | | | | | | | | | | |
| None | 94 | 73 | 58 | 44 | 12 | 2 | 1 | 2 | 1 | 2 | 1 | 3 | 21 | 17 | 10 | 21 | | | | |
| Less than 100 | 1 | 5 | 4 | 16 | 16 | 5 | 1 | 5 | 1 | 5 | 6 | 10 | 7 | 22 | 21 | 29 | | | | |
| 100 - 199 | 1 | 6 | 9 | 12 | 12 | 8 | 3 | 8 | 3 | 8 | 10 | 13 | 17 | 21 | 21 | 21 | | | | |
| 200 - 299 | 1 | 6 | 9 | 12 | 8 | 13 | 4 | 13 | 4 | 13 | 12 | 14 | 14 | 19 | 14 | 14 | | | | |
| 300 - 499 | 1 | 5 | 6 | 5 | 5 | 15 | 10 | 15 | 10 | 15 | 33 | 14 | 24 | 13 | 23 | 9 | | | | |
| 500 - 999 | 1 | 3 | 10 | 3 | 3 | 58 | 81 | 58 | 81 | 58 | 38 | 46 | 17 | 8 | 11 | 6 | | | | |
| 1,000 or more | 1 | 2 | 4 | 3 | 3 | | | | | | | | | | | | | | | |

^{1/} As previously stated, only outlets which normally handled some fruits and vegetables were included in this survey.

^{2/} For explanation of income areas, see table 5.

^{3/} Less than one percent.

Source: Data obtained from chain store and independent retailers in New York City.

Table 9.- QUANTITIES OF LEADING CANNED FRUITS AND CANNED JUICES
SOLD WEEKLY, AS REPORTED BY 1,151 ^{1/} RETAIL OUTLETS, NEW YORK
CITY, AUGUST, 1939

| Commodity | Quantities sold weekly | | Percent of total sales |
|--|------------------------|---------------------------------|---------------------------|
| | Total Pounds | Average per outlet Pounds | |
| Canned Fruit: | | | |
| Peaches | 33,480 | 29 | 10 |
| Pineapple | 20,115 | 18 | 7 |
| Applesauce | 19,560 | 17 | 6 |
| Pears | 15,300 | 13 | 5 |
| Grapefruit | 11,760 | 10 | 4 |
| Total canned fruit | 100,215 | 87 | 32 |
| Canned Juice: | | | |
| Tomato | 73,584 | 64 | 23 |
| Pineapple | 60,507 | 53 | 19 |
| Grapefruit | 55,458 | 48 | 17 |
| Grape | 12,936 | 11 | 4 |
| Orange | 8,122 | 7 | 3 |
| Prune | 7,272 | 6 | 2 |
| Total canned juice | 217,879 | 189 | 68 |
| Total canned fruit and canned juice | 318,094 | 276 | 100 |

^{1/} The 317 pushcart operators and 75 wagon or motor hucksters, who were included in this survey, did not report the sales of any canned fruit or canned juice.

Source: Data obtained from chain store and independent retailers in New York City.

calculated this means that sales of canned fruits and fruit juices by these outlets were about one-ninth as great, pound for pound, as sales of fresh fruits. In the case of apples, fresh apples totaled 222,040 pounds compared with 19,560 pounds of applesauce, or roughly in a ratio of about 11 to 1.

The 6 leading canned juices made up 68 percent of combined volume of 318,094 pounds of canned fruits and juices sold (table 9). Tomato juice was outstandingly important, and led all other juices by a substantial margin. Approximately 5 times as much grapefruit juice was handled as of canned grapefruit, and about 3 times as much pineapple juice as of canned pineapple. Peaches led all canned fruit, constituting about one-third of the sales of canned fruit. Applesauce and canned pineapple were approximately equal in importance.

Relative Sales Volume for Each Type of Outlet

The pushcart and the wagon or motor huckster methods of doing business are probably not well adapted to the sale of canned goods. At any rate, none of the pushcart operators and none of the wagon or motor hucksters, included in this study, sold any canned fruits or canned juices. While some of the fruit and vegetable stands and meat markets handled canned fruits and canned juices during August 1939, the retailing of such canned foods seems to be essentially a grocery store proposition (including delicatessens). Chain grocery stores were outstandingly leaders in sales per store. Sales of the 5 leading canned fruits by chain grocery stores averaged about 245 pounds per week compared with 80 pounds per week in independent grocery stores, 16 pounds in meat markets and only 4 pounds in fruit and vegetable stands (table 10).

Sales of the leading 6 canned juices averaged about 589 pounds per week in chain grocery stores, 145 pounds in independent grocery stores, 24 pounds in meat markets and 4 pounds in fruit and vegetable stands.

If sales of applesauce in independent grocery stores, meat markets and independent fruit and vegetable stores could be increased to the sales levels attained in chain grocery stores, a substantial part of the lower grades of the apple crop might be diverted from fresh fruit channels. At any rate, these data may indicate to cooperative canners and others, where sales pressure has the best chance to produce results that would be most helpful to the apple industry.

INFLUENCE OF FAMILY INCOMES

Income Related to Sales of Fresh Fruit

Total sales of the various kinds of fruit by these 1,543 retail outlets show clearly that there is a relationship between family

Table 10.- IMPORTANCE OF VARIOUS TYPES OF RETAIL FOR SALES OF SELECTED CANNED FRUITS AND FRUIT JUICES,
AS REPORTED BY 1,151 1/ RETAILERS, NEW YORK CITY, AUGUST, 1939

| Commodity | Quantities sold weekly per retail outlet | | | | | Average 1,151 retail outlets Pounds |
|--|--|-------------------------------|-------------------------|---------------------------------|-------|--|
| | 418 fruit and vegetable stores Pounds | Grocery stores | | 63 meat markets Pounds | | |
| | | 406 independents Pounds | 264 chains Pounds | | | |
| | | | | | | |
| Canned Fruit: | | | | | | |
| Peaches | 1.5 | 29.7 | 77.4 | 5.8 | 29.1 | |
| Pineapple | 1.0 | 17.2 | 47.3 | 3.9 | 17.5 | |
| Applesauce | 0.8 | 14.4 | 49.9 | 3.1 | 17.0 | |
| Pears | 0.6 | 12.3 | 37.5 | 2.1 | 13.3 | |
| Grapefruit | 0.4 | 6.8 | 33.1 | 1.5 | 10.2 | |
| Total canned fruit | 4.3 | 80.4 | 245.2 | 16.4 | 87.1 | |
| Canned Juice: | | | | | | |
| Tomato | 1.4 | 49.9 | 197.7 | 8.7 | 63.9 | |
| Pineapple | 1.4 | 37.8 | 167.5 | 5.7 | 52.6 | |
| Grapefruit | 0.9 | 36.3 | 151.5 | 5.5 | 48.2 | |
| Grape | 0.3 | 9.5 | 33.5 | 1.9 | 11.2 | |
| Orange | 0.3 | 6.2 | 20.6 | 1.0 | 7.1 | |
| Prune | 0.1 | 5.6 | 18.6 | 0.8 | 6.3 | |
| Total canned juice | 4.4 | 145.3 | 589.4 | 23.6 | 189.3 | |
| Total canned fruit and canned juice | 8.7 | 225.7 | 834.6 | 40.0 | 276.4 | |

1/ The 317 pushcart operators and 75 wagon or motor hucksters, who were included in this survey, did not report the sales of any canned fruit or canned juices.

Source: Data obtained from chain stores and independent retailers in New York City.

incomes in a neighborhood as measured by rentals paid, and sales per retail outlet. Sales of these selected fruits per outlet averaged 1,332 pounds per week in the lowest income areas, and 2,327 pounds in highest income areas (table 11). In other words, sales of fruit were about 1,000 pounds greater per outlet in the highest income areas than in the lowest, despite the absence from the city of many high-income families on vacations during August. However, the fact should be kept in mind that there are more families served per retail fruit outlet in high income areas than in low income areas. Information on the number of families per retail fruit outlet in various income areas, which may be helpful in the interpretation of certain data in this report, is being assembled and will be included in a later report.

Income Areas Related to Sales of Canned Fruits and Fruit Juices

Many have assumed that families in low income areas characteristically use canned fruits and fruit juices, because they are cheaper than fresh fruit, and that families in high income areas consume mostly fresh fruit. Judging from sales per retail outlet, families in low income areas not only use relatively small quantities of fresh fruits, but also use relatively small quantities of canned fruits and juices compared to families in higher income areas.

Sales of the leading 5 canned fruits averaged about 35 pounds weekly, per retail outlet in lowest income areas, and 123 pounds per outlet (or more than 3 times as much) in highest income areas (table 12). Similarly, sales of the 6 leading canned juices in the lowest income areas (69 pounds weekly per outlet) were less than one-fourth as large as in the highest income areas (290 pounds per outlet).

Certain characteristics of demand seem to predominate regardless of income. For example, peaches were the most popular canned fruit in all income areas, and tomato juice was the most popular canned juice in all except the medium-high income areas. Within each income area, canned applesauce and canned pineapple seemed about equally popular, although in the highest income areas, sales of canned pineapple were slightly higher. Sales of canned applesauce per retail outlet in low and medium-low income areas were twice as large as of canned grapefruit, and even in medium-high and high income areas, sales of applesauce per retail outlet were substantially higher than sales of canned grapefruit.

While some interest was manifested in the possibilities of apple juice, this commodity was handled by only a few stores and in small quantities. The general opinion of the retail trade, whether correct or incorrect, seemed to be that an apple juice, which would appeal to the public, had not yet been placed on the market in such a manner or such a volume as to obtain consumer recognition and demand. If and when apple juice attains such a status, there should be little doubt that retailers will merchandise it as actively as the other canned juices.

Table 11.- AVERAGE QUANTITIES OF SELECTED FRUITS SOLD WEEKLY PER
OUTLET IN EACH INCOME AREA, AS REPORTED BY 1,543 RETAIL OUTLETS,
NEW YORK CITY, AUGUST 1939

| Fruit | Quantity sold weekly per outlet in each income area 1/ | | | |
|-----------------------------|--|-----------|-----------|--------------|
| | Less than \$35 | \$35 - 49 | \$50 - 64 | \$65 or more |
| | Pounds | Pounds | Pounds | Pounds |
| Apples: | | | | |
| Eastern | 97 | 122 | 163 | 161 |
| Western | 9 | 8 | 11 | 12 |
| Oranges: | | | | |
| California | 159 | 226 | 287 | 504 |
| Florida | 79 | 138 | 50 | 36 |
| Grapefruit | 33 | 35 | 42 | 56 |
| Bananas | 60 | 172 | 186 | 170 |
| Peaches | 328 | 402 | 329 | 421 |
| Pears: | | | | |
| Eastern | 21 | 8 | 22 | 12 |
| Western | 137 | 137 | 110 | 117 |
| Grapes: | | | | |
| Eastern | --- | --- | --- | 1 |
| Western | 107 | 85 | 105 | 113 |
| Cantaloupes | 106 | 243 | 304 | 316 |
| Honeydew melons | 84 | 46 | 103 | 148 |
| Honeyball melons | 16 | 28 | 26 | 14 |
| Other melons | --- | --- | --- | 9 |
| Watermelons | 91 | 165 | 217 | 237 |
| Total all fruit | 1,332 | 1,815 | 1,965 | 2,327 |
| Index numbers, all fruit | 100 | 136 | 148 | 175 |

1/ For explanation of income areas, see footnote 2, table 5, page 11.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 12.- RELATION OF FAMILY INCOME TO WEEKLY SALES OF IMPORTANT CANNED FRUITS AND CANNED JUICES PER RETAIL OUTLET, AS REPORTED BY 1,151 RETAIL OUTLETS, NEW YORK CITY, AUGUST 1939

| Commodity | Quantity sold weekly per retail outlet in each income area <u>1/</u> | | | |
|--|---|-------------------|--------------------|---------------|
| | Low income | Medium-low income | Medium-high income | High income |
| | <u>Pounds</u> | <u>Pounds</u> | <u>Pounds</u> | <u>Pounds</u> |
| Canned fruit: | | | | |
| Peaches | 13 | 27 | 33 | 38 |
| Pineapple | 7 | 13 | 21 | 26 |
| Applesauce | 7 | 13 | 21 | 24 |
| Pears | 5 | 11 | 14 | 21 |
| Grapefruit | 3 | 6 | 15 | 14 |
| Total canned fruit | 35 | 70 | 104 | 123 |
| Canned juice: | | | | |
| Tomato | 27 | 42 | 61 | 108 |
| Pineapple | 13 | 34 | 79 | 70 |
| Grapefruit | 17 | 31 | 57 | 75 |
| Grape | 2 | 8 | 14 | 18 |
| Orange | 3 | 7 | 8 | 9 |
| Prune | 2 | 5 | 7 | 10 |
| Total canned juice | 69 | 127 | 226 | 290 |
| Total canned fruit and canned juice | 104 | 197 | 330 | 413 |

1/ For explanation of income areas, see footnote 2, table 5.

Source: Data obtained from chain stores and independent retailers in New York City.

Income and Realized Retail Prices

While there were some noteworthy exceptions, there seems to have been a fairly close relationship between the average family income in a particular neighborhood (as measured by median rental paid) and the retail price realized per pound for various fruits.

Eastern apples sold for 2.8 cents per pound in the lowest income areas, and 4.4 cents in highest income areas, a difference of almost 60 percent (table 13). California oranges sold for 5.9 cents per pound in low income areas, and 7.4 cents in high income areas, a difference of about 25 percent. Comparable prices for other fruits were as follows: bananas, 3.3 cents and 5.0 cents (difference about 50 percent); peaches, 4.1 cents and 5.4 cents (difference 32 percent); western apples, 4.7 cents and 7.7 cents (difference about 64 percent). How much of these differences was due to quality of fruits, service or other factors was not determined. From a practical point of view, however, the data in table 13 probably indicate approximately the comparative levels of prices which consumers in each income class are willing to pay. They probably also indicate the approximate differences in levels of prices which cooperative associations, individual growers, and others must consider in any plans for increasing consumption of fruits.

Income and Average Retail Margins

Retail margins were calculated in percentage of the realized retail selling price per unit purchased ⁴/₁. Such retail margins were not closely related to either prices or income areas. In the case of eastern apples, the greatest average gross percentage margin was taken in the lowest income areas (i.e. 50 percent); while with western apples, the greatest average margin (42 percent) was that charged in the highest income areas (table 13). In the case of oranges, peaches, pears, California grapes, and watermelons, gross retail percentage margins were greater in the highest income areas than in the lowest. On the other hand, gross percentage margins on bananas, cantaloupes, and honeyball melons were greater in the lowest income areas than in the highest income areas.

On the basis of cents per pound, however, the margin situation was slightly different. While the average realized retail selling price tends to be higher with each income group, it should also be noted that the average cost to retailers likewise tended to be higher. In this connection it is noted that a greater percentage gross margin may or may not mean a greater actual margin in cents per pound. For example, the gross average retail margin on eastern apples was exactly the same (i.e., 1.4 cents per pound) in 2 out of 4 income areas, and cost prices were identical in 2 out of 4 areas, but average realized retail prices and percentage gross margins were unlike in all areas.

⁴/₁ For explanation of "retail margin" and "realized retail price" see footnote 2, page 5.

Table 13.-- RELATION OF FAMILY INCOME TO AVERAGE REALIZED RETAIL PRICES AND GROSS MARGINS ON VARIOUS FRUITS AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Fruit | Realized retail prices and margins in each income area. 1/ | | | | | | | | | | | | Average all areas | |
|------------------|--|-----------------|-------------------------|---------------------------|-----------------|-------------------------|---------------------------|-----------------|-------------------------|---------------------------|-----------------|-------------------------|---------------------------|-----------------|
| | Low income | | | | Medium-low | | | | Medium-high | | | | High income | |
| | Gross margin | | Percent | | Gross margin | | Percent | | Gross margin | | Percent | | Gross margin | |
| | Retail price per lb Cents | Per pound Cents | of retail price Percent | Retail price per lb Cents | Per pound Cents | of retail price Percent | Retail price per lb Cents | Per pound Cents | of retail price Percent | Retail price per lb Cents | Per pound Cents | of retail price Percent | Retail price per lb Cents | Per pound Cents |
| Apples: | | | | | | | | | | | | | | |
| Eastern | 2.8 | 1.4 | 50 | 3.3 | 1.4 | 42 | 3.5 | 1.6 | 46 | 4.4 | 2.1 | 48 | 3.6 | 1.7 |
| Western | 4.7 | 1.2 | 26 | 7.0 | 2.8 | 40 | 6.6 | 2.5 | 38 | 7.7 | 3.2 | 42 | 6.5 | 2.4 |
| Oranges: | | | | | | | | | | | | | | |
| California | 5.9 | 1.0 | 17 | 6.3 | 1.4 | 22 | 7.0 | 1.4 | 20 | 7.4 | 1.6 | 22 | 6.8 | 1.4 |
| Florida | 3.4 | 0.5 | 15 | 3.4 | 0.5 | 15 | 4.1 | 0.7 | 17 | 4.9 | 1.1 | 22 | 3.7 | 0.6 |
| Grapefruit | 3.3 | 0.8 | 24 | 3.9 | 1.1 | 28 | 4.9 | 1.6 | 33 | 6.0 | 1.8 | 30 | 4.6 | 1.3 |
| Bananas | 3.3 | 0.8 | 24 | 3.8 | 0.7 | 18 | 4.3 | 0.5 | 12 | 5.0 | 0.7 | 14 | 4.2 | 0.6 |
| Peaches | 4.1 | 0.9 | 22 | 4.9 | 1.2 | 24 | 5.1 | 1.1 | 22 | 5.4 | 1.3 | 24 | 4.8 | 1.1 |
| Pears: | | | | | | | | | | | | | | |
| Eastern | 3.4 | 0.7 | 21 | 3.9 | 1.4 | 36 | 3.8 | 1.5 | 39 | 5.2 | 2.1 | 40 | 3.9 | 1.3 |
| Western | 7.1 | 1.1 | 15 | 7.2 | 1.5 | 21 | 8.0 | 1.5 | 19 | 8.4 | 2.0 | 24 | 7.6 | 1.5 |
| Grapes: | | | | | | | | | | | | | | |
| Western | 6.6 | 1.1 | 17 | 7.5 | 1.8 | 24 | 7.4 | 1.6 | 22 | 8.0 | 2.0 | 25 | 7.3 | 1.6 |
| Eastern | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.7 | 3.7 | 43 | 2/ | 2/ |
| Cantaloupes | 2.8 | 0.8 | 29 | 2.6 | 0.7 | 27 | 3.0 | 0.8 | 27 | 3.5 | 0.8 | 23 | 3.0 | 0.7 |
| Honeydew Melons | 5.7 | 1.1 | 19 | 6.3 | 1.3 | 21 | 6.4 | 1.2 | 19 | 6.6 | 1.3 | 20 | 6.3 | 1.3 |
| Honeyball Melons | 6.2 | 2.4 | 39 | 5.2 | 1.1 | 21 | 6.6 | 1.1 | 17 | 6.4 | 1.4 | 22 | 6.0 | 1.4 |
| Other Melons | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6.6 | 1.3 | 20 | 2/ | 2/ |
| Watermelons | 1.2 | 0.3 | 25 | 1.7 | 0.5 | 29 | 2.1 | 0.5 | 24 | 2.0 | 0.6 | 30 | 1.8 | 0.5 |

1/ For explanation of income areas, see table 5, page 11.

2/ Sales reported only in high income areas.

Source: Data obtained from chain stores and independent retailers in New York City.

GROSS RETAIL MARGINS 5/

The gross retail margin as used in this report is the difference between the cost delivered at the retail outlet for each package of fruit and the amount realized from retail sales for that same quantity after making adjustments for spoilage losses. The data show that gross retail margins on each fruit differed greatly among individual outlets and between groups of outlets. Cost of operation as a percentage of total dollar sales establishes the minimum average percentage margin on which any outlet can continue to operate. Individual items may, and often do, bring more or less than this minimum. It is realized that there are many factors which influence the prices at which commodities can be purchased. Also the reaction of the consumer to retail prices and the competition of other retailers influence retail prices. The many factors that determine these two prices determine the maximum amount of the gross retail margin that can be obtained, but the retailer for one reason or another may not get the maximum margin. This preliminary report is not intended to treat all angles of the question; instead it shows what margins were realized by various groups of retailers from various types of fruits. Other aspects of the problem will be discussed in later reports.

Gross retail margins on fruits sold during August varied with the individual fruit, with the type of retail outlet, within each type of retail outlet and with income areas. As previously shown (table 2), the average gross retail margin on all fresh fruit was 22 percent. For all outlets involved, 37 percent obtained less than 20 percent gross margin while almost one-quarter obtained 30 percent or more (table 14). Sixty-two percent of the pushcart operators; 38 percent of the chain-store operators; and 35 percent of the independent fruit and vegetable stores obtained less than 20 percent gross margin. Forty percent of the meat markets, 34 percent of the independent grocery stores, 31 percent of the wagon hucksters, and 27 percent of the chain grocery stores obtained 30 percent or more gross retail margin.

The differences between the various types of retail outlets in average gross margins on individual fruits were equally striking. On eastern apples, gross retail margins ranged from 0.9 cents per pound by wagon hucksters to 2.2 cents per pound by independent grocers, and the percentage gross margin from 52 percent for pushcart operators to 39 percent for wagon or motor hucksters (table 15). On California oranges, gross retail margins per pound were highest in meat markets (2 cents) and lowest among pushcart operators (4/5 of a cent). Similar variations occurred with all other fruits studied. The lowest average gross retail margin per pound (7/10 of a cent) was taken by wagon or motor hucksters; with chain

5/ For explanation of "retail margin," see footnote 2, page 5.

Table 14.- DISTRIBUTION OF GROSS RETAIL MARGINS OBTAINED ON 12 FRESH FRUITS HANDLED, 1,543 RETAIL OUTLETS, NEW YORK CITY, AUGUST 1939

| Range in average gross margin (all fruit) | Proportion of outlets in each gross margin group, by type of outlet | | | | | | | Total all outlets |
|---|---|----------------|-------------|--------------|--------------------|--------------------------|---------|-------------------|
| | Fruit and vegetable stores | Grocery stores | | Meat markets | Pushcart operators | Wagon or motor hucksters | Percent | |
| | | Percent | Independent | | | | | Chain |
| Loss | 3 | 2 | 6 | 3 | 6 | 2 | 4 | |
| Less than 15 | 17 | 11 | 23 | 5 | 35 | 10 | 19 | |
| 15 - 19 | 18 | 14 | 15 | 16 | 27 | 11 | 18 | |
| 20 - 24 | 22 | 15 | 12 | 22 | 16 | 14 | 17 | |
| 25 - 29 | 20 | 20 | 12 | 13 | 8 | 32 | 16 | |
| 30 - 34 | 12 | 18 | 9 | 20 | 3 | 19 | 12 | |
| 35 - 49 | 7 | 15 | 12 | 19 | 5 | 9 | 10 | |
| 50 or more | 1 | 1 | 6 | 1 | -- | 3 | 2 | |
| Unknown | 1/ | 4 | 5 | 1 | 2 | -- | 2 | |
| Total number of outlets | 418 | 406 | 264 | 63 | 317 | 75 | 1,543 | |

1/ Less than 1 percent.

Source: Data obtained from chain stores and independent retailers in New York City.

grocery stores second, (eight-tenths of a cent); pushcart operators third, (nine-tenths of a cent) and independent grocery stores highest (1 and 6/10 of a cent). On a percentage basis, chain grocery stores charged the lowest average gross retail margin (17 percent) and meat markets and independent grocery stores charged the highest (28 percent respectively). Table 15 gives some evidence that a high retail price and a high gross retail margin do not necessarily go together. The highest gross margin on eastern apples (52 percent) was taken by pushcart operators on apples which cost 1.3 cents per pound delivered at their pushcarts and on which a price of 2.7 cents per pound was realized. Chain grocery stores realized 4.4 cents per pound for apples which cost 2.5 cents per pound but the gross percentage margin was only 43 percent.

An assumption commonly expressed is that the largest retail sales volumes of a given product occur where the lowest gross margin is charged. This may be a correct assumption for some commodities, but did not hold true for most of the fresh fruits included in this study. Of the fruits merchandised by these 1,543 retail outlets, during August 1939, average sales were largest at the lowest margins for only two fruits - California oranges and western grapes, as may be noted from the following analysis of each fruit.

Margins on Apples (Eastern)

Out of 1,543 outlets, 930 or 60 percent handled eastern apples (table 16). Only 14 percent of these outlets handled eastern apples on a margin or less than 30 percent. Largest sales per outlet (317 pounds per week) were reported by 8 percent of the outlets which took from 60 to 69 percent gross margin. Average sales of 256 pounds per week were reported by 24 percent of these outlets on a margin of 50 to 59 percent, while sales of 167 pounds per week were reported by 3 percent of these outlets on a margin of less than 15 percent, and the same average quantity per week was reported also by 11 percent of the outlets which charged 30 to 34 percent margin.

Margins on Apples (Western)

Only 224 out of 1,543 retail outlets (15 percent) handled western apples during August 1939 (table 17). Eight percent sold about 47 pounds weekly per retail outlet on a margin of less than 15 percent, while largest sales per outlet (102 pounds per week) were reported by outlets realizing a gross margin of 25 to 29 percent. Forty-one percent of these outlets obtained a gross margin of 40 to 59 percent.

Table 16.-- Apples (Eastern): RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET, 1/ NEW YORK CITY, AUGUST 1929

| Range in average gross margin Percent | Weekly sales of eastern apples per retail outlet, by type of store | | | | | | | Average 930 outlets Pounds |
|--|--|-------------------------------|-------------------------|------------------------------|-------------------------------------|--|-----|-------------------------------|
| | 320 fruit and vegetable stores Pounds | Grocery Stores | | 52 meat markets Pounds | 116 pushcart operators Pounds | 41 wagon or motor hucksters Pounds | | |
| | | 220 independents Pounds | 181 chains Pounds | | | | | |
| Loss sales | 67 | 32 | 96 | 24 | --- | 216 | 70 | |
| Less than 15 | 92 | 56 | 93 | 176 | 720 | 384 | 167 | |
| 15 - 19 | 116 | 24 | 129 | 24 | 696 | 408 | 199 | |
| 20 - 24 | 205 | 91 | 125 | 72 | 120 | --- | 155 | |
| 25 - 29 | 203 | 78 | 103 | 24 | 192 | 403 | 156 | |
| 30 - 34 | 171 | 83 | 122 | 173 | 333 | 704 | 167 | |
| 35 - 39 | 158 | 132 | 119 | 253 | 312 | 1,027 | 203 | |
| 40 - 49 | 199 | 153 | 128 | 326 | 422 | 668 | 227 | |
| 50 - 59 | 201 | 163 | 224 | 224 | 564 | 421 | 256 | |
| 60 - 69 | 247 | 129 | 126 | 192 | 724 | 376 | 317 | |
| 70 or more | 110 | 483 | 240 | --- | 528 | --- | 301 | |

| Loss sales | Proportion of stores in each classification | | | | | | | Percent |
|--------------|---|---------|---------|---------|---------|---------|---------|---------|
| | Percent | Percent | | Percent | | Percent | | |
| | | Percent | Percent | Percent | Percent | Percent | Percent | |
| Loss sales | 2 | 1 | 1 | 2 | --- | 3 | 1 | |
| Less than 15 | 4 | 1 | 2 | 9 | 2 | 5 | 3 | |
| 15 - 19 | 2 | 1 | 4 | 2 | 2 | 5 | 2 | |
| 20 - 24 | 5 | 2 | 6 | 4 | 2 | --- | 4 | |
| 25 - 29 | 3 | 5 | 10 | 2 | 4 | 12 | 5 | |
| 30 - 34 | 11 | 12 | 12 | 9 | 8 | 7 | 11 | |
| 35 - 39 | 13 | 11 | 18 | 8 | 15 | 13 | 14 | |
| 40 - 49 | 24 | 30 | 26 | 29 | 22 | 27 | 26 | |
| 50 - 59 | 23 | 29 | 16 | 33 | 27 | 22 | 24 | |
| 60 - 69 | 10 | 7 | 4 | 2 | 14 | 7 | 8 | |
| 70 or more | 3 | 1 | 1 | --- | 4 | --- | 2 | |

| | Proportion of stores in each classification | | | | | | Percent |
|--------------|---|---------|---------|---------|---------|---------|---------|
| | Percent | Percent | Percent | Percent | Percent | Percent | |
| Loss sales | 2 | 1 | 1 | 2 | -- | 3 | 1 |
| Less than 15 | 4 | 1 | 2 | 9 | 2 | 5 | 3 |
| 15 - 19 | 2 | 1 | 4 | 2 | 2 | 5 | 2 |
| 20 - 24 | 5 | 2 | 6 | 4 | 2 | 5 | 4 |
| 25 - 29 | 3 | 5 | 10 | 2 | 4 | -- | 5 |
| 30 - 34 | 11 | 12 | 12 | 9 | 8 | 12 | 11 |
| 35 - 39 | 13 | 11 | 18 | 8 | 15 | 7 | 14 |
| 40 - 49 | 24 | 30 | 26 | 29 | 22 | 13 | 26 |
| 50 - 59 | 23 | 29 | 16 | 33 | 27 | 27 | 24 |
| 60 - 69 | 10 | 7 | 4 | 2 | 14 | 22 | 8 |
| 70 or more | 3 | 1 | 1 | -- | 4 | 7 | 2 |

1/ The above data include only those stores which actually handled eastern apples. Stores handling eastern apples were in the following proportions to total stores of each type included in this survey: fruit and vegetable stores, 77%; independent grocery stores, 54%; chain grocery stores, 63%; meat markets, 83%; pushcart operators, 37%; wagon or motor hucksters, 55%; and all retail outlets, 60%.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 17.- Apples (Western): RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/. NEW YORK CITY, AUGUST 1939

| Range in average gross margin Percent | Weekly sales of western apples per retail outlet, by each type of store | | | | | | Average 224 2/ outlets Pounds |
|--|---|--------------|----------------|---------|-----------------|--------------------|-------------------------------------|
| | 111 fruit and vegetable stores | | Grocery stores | | 15 meat markets | | |
| | Pounds | independents | 57 | 30 | Pounds | pushcart operators | |
| | | | | | | | |
| Loss sales | 22 | 31 | 47 | 880 | 111 | | |
| Less than 15 | 36 | 99 | 55 | 44 | 47 | | |
| 15 - 19 | 67 | 44 | 51 | --- | 61 | | |
| 20 - 24 | 55 | 66 | 34 | 132 | 80 | | |
| 25 - 29 | 94 | 58 | 73 | 88 | 102 | | |
| 30 - 34 | 117 | 30 | 44 | 88 | 93 | | |
| 35 - 39 | 57 | 42 | 44 | 33 | 52 | | |
| 40 - 49 | 51 | 62 | 47 | 44 | 55 | | |
| 50 - 59 | 54 | 35 | 31 | 132 | 55 | | |
| 60 - 69 | 121 | 70 | 40 | 105 | 78 | | |
| 70 or more | 11 | --- | --- | --- | 11 | | |
| | | | | | | | |
| Loss sales Less than 15 15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 49 50 - 59 60 - 69 70 or more | Proportion of stores in each classification | | | | | | Percent |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| | 2 | 9 | 10 | --- | 10 | 10 | 5 |
| | 11 | 3 | 13 | 7 | --- | --- | 8 |
| | 7 | 2 | 10 | --- | --- | --- | 5 |
| | 4 | 3 | 7 | 7 | 20 | 20 | 5 |
| | 12 | 12 | 10 | 7 | 10 | 11 | 11 |
| | 13 | 11 | 3 | 7 | 30 | 11 | 11 |
| | 13 | 11 | 7 | 12 | 10 | 30 | 11 |
| | 23 | 26 | 13 | 20 | 10 | 10 | 30 |
| | 10 | 12 | 10 | 20 | 10 | 10 | 11 |
| | 4 | 11 | 17 | 20 | --- | --- | 3 |
| | 1 | --- | --- | --- | --- | --- | 3/ |

1/ The above data include only those stores which actually handled Western Apples. Stores handling Western Apples were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 27%; independent grocery stores, 14%; chain grocery stores, 11%; meat markets, 24%; pushcart operators, 3%; wagon or motor hucksters, 1%; and all retail outlets, 15%.

2/ Includes one wagon or motor huckster that handled 132 lbs. of Western Apples at a 42% gross margin.

3/ Less than one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 18.- Oranges (California): RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin Percent | Weekly sales of California oranges per retail outlet, by each type of store | | | | | | | Average 1,196 outlets Pounds |
|---|---|----------------------------|----------------------|---------------------------|----------------------------------|------------------------------|---------|---------------------------------|
| | 393 fruit and vegetable stores Pounds | Grocery stores | | 58 meat markets Pounds | 115 pushcart operators Pounds | 33 wagon hucksters Pounds | | |
| | | 355 independents Pounds | 242 chains Pounds | | | | | |
| | | | | | | | | |
| Loss sales | 284 | 257 | 872 | 70 | 496 | | 484 | |
| Less than 15 | 359 | 152 | 629 | 140 | 653 | 480 | 438 | |
| 15 - 19 | 285 | 210 | 339 | 936 | 910 | 358 | 361 | |
| 20 - 24 | 411 | 224 | 306 | 511 | 499 | 450 | 344 | |
| 25 - 29 | 378 | 245 | 487 | 603 | 321 | 490 | 361 | |
| 30 - 34 | 366 | 292 | 573 | 300 | 476 | 105 | 383 | |
| 35 - 39 | 405 | 193 | 433 | 280 | 356 | 271 | 304 | |
| 40 - 50 | 236 | 265 | 257 | 210 | 113 | 595 | 257 | |
| 50 or more | 204 | 108 | | 298 | 350 | | 245 | |
| Proportion of stores in each classification | | | | | | | | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent | |
| Loss sales | 6 | 4 | 9 | 2 | 5 | -- | 5 | |
| Less than 15 | 20 | 15 | 28 | 9 | 40 | 21 | 22 | |
| 15 - 19 | 17 | 14 | 18 | 14 | 14 | 28 | 16 | |
| 20 - 24 | 16 | 20 | 22 | 31 | 13 | 21 | 19 | |
| 25 - 29 | 18 | 19 | 15 | 15 | 11 | 9 | 16 | |
| 30 - 34 | 7 | 9 | 5 | 14 | 9 | 3 | 8 | |
| 35 - 39 | 7 | 8 | 1 | 5 | 5 | 12 | 6 | |
| 40 - 49 | 7 | 9 | 2 | 3 | 2 | 6 | 6 | |
| 50 or more | 2 | 2 | -- | 7 | 1 | -- | 2 | |

1/ The above data include only those stores which actually handled California oranges. Stores handling California oranges were in the following proportions to total stores of each type included in this survey: fruit and vegetable stores, 94%; independent grocery stores, 87%; chain grocery stores, 92%; meat markets, 92%; pushcart operators, 36%; wagon or motor hucksters, 44%; all retail outlets, 78%.

Source: Data obtained from chain stores and independent retailers in New York City.

Margins on Oranges (California)

Experience in selling California oranges seems to have differed decidedly from that with apples. The largest volume per retail outlet (434 pounds per week) was handled by 5 percent of the outlets which operated at a loss, insofar as California oranges were concerned (table 18). The next largest sales were reported by 22 percent of the outlets which charged less than 15 percent gross margin and which sold 438 pounds per week, and the smallest sales by 2 percent which charged 50 percent or more gross margin. With California oranges, at least, weekly sales per retail outlet seem to have declined more or less regularly as the gross retail margin increased. Of the 1,543 retail outlets, 78 percent handled California oranges, but only 20 percent handled Florida oranges. The number of outlets handling Florida oranges seems large when it is known that the Florida season ended during August.

Margins on Oranges (Florida)

Although 18 percent of the 308 outlets, which handled Florida oranges, incurred losses in handling them during August 1939, largest sales per outlet were not in the outlets reporting losses, nor were they in the stores taking less than 15 percent gross margin (table 19). Maximum sales per outlet occurred in the 13 percent of the stores where a margin of 15 to 19 percent was taken, and second largest in the 27 percent which charged less than 15 percent gross margin. Third largest sales, however (362 pounds weekly per outlet) were reported in the outlets which charged 50 percent or more gross margin. It should be noted, however, that 53 percent of these stores handled Florida oranges on a margin of 25 percent or less.

Margins on Grapefruit

As might be expected in the "off-season" for grapefruit, only about one in three outlets handled grapefruit. Sales per outlet, where the gross margin was 35 to 39 percent, were approximately the same (152 pounds per week) as where the gross margin taken was 20 to 24 percent (154 pounds per week). In these instances, "loss" sales did not result in large sales per outlet (table 20).

Margins on Peaches

Eighty-two percent of the 1,543 retail outlets handled peaches during August and there seems to have been remarkably little difference in sales per retail outlet whether the margin was 15 or 50 percent, or whether sold at a loss. Maximum sales per outlet (499 pounds per week) actually occurred where from 15 to 19 percent margin was taken, but sales per outlet at a gross margin of 50 percent or more were actually greater than sales at 30 to 35 percent gross margin (table 21).

Table 19.-- Oranges (Florida): RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin Percent | Weekly sales of Florida oranges per retail outlet, by each type of store | | | | | | Average 308 2/ outlets Pounds |
|---|--|---------------------------|---------------------|---------------------------|---------------------------------|---------|-------------------------------------|
| | 117 fruit and vegetable stores Pounds | Grocery stores | | 12 meat markets Pounds | 46 pushcart operators Pounds | | |
| | | 70 independents Pounds | 61 chains Pounds | | | | |
| Loss sales | 218 | 193 | 180 | 114 | 92 | 255 | |
| Less than 15 | 417 | 146 | 227 | 540 | 1,338 | 527 | |
| 15 - 19 | 397 | 202 | 468 | 180 | 2,026 | 568 | |
| 20 - 24 | 323 | 191 | 360 | 66 | 354 | 296 | |
| 25 - 29 | 218 | 198 | 112 | 210 | 585 | 276 | |
| 30 - 34 | 225 | 191 | 74 | 240 | 90 | 182 | |
| 35 - 39 | 434 | 198 | 291 | --- | 42 | 296 | |
| 40 - 49 | 86 | 270 | 90 | --- | 870 | 258 | |
| 50 or more | 253 | 135 | --- | --- | 1,710 | 362 | |
| Proportion of stores in each classification | | | | | | | |
| | Percent | Percent | Percent | Percent | Percent | Percent | |
| Loss sales | 25 | 10 | 20 | 17 | 9 | 18 | |
| Less than 15 | 27 | 17 | 36 | 8 | 39 | 27 | |
| 15 - 19 | 9 | 16 | 16 | 8 | 11 | 13 | |
| 20 - 24 | 15 | 12 | 11 | 17 | 15 | 13 | |
| 25 - 29 | 3 | 14 | 7 | 25 | 13 | 9 | |
| 30 - 34 | 3 | 11 | 5 | 25 | 2 | 6 | |
| 35 - 39 | 6 | 7 | 3 | --- | 2 | 5 | |
| 40 - 49 | 9 | 7 | 2 | --- | 7 | 6 | |
| 50 or more | 3 | 6 | --- | --- | 2 | 3 | |

1/ The above data include only those stores which actually handled Florida oranges. Stores handling Florida oranges were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 26%; independent grocery stores, 17%; chain grocery stores, 23%; meat markets, 19%; pushcart operators, 15%; wagon or motor trucksters, 3%; all retail outlets, 20%.

2/ Includes two trucksters handling Florida oranges, but too few to analyze for comparisons.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 20.- Grapefruit: RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET ^{1/} NEW YORK CITY, AUGUST 1939

| Range in average gross margin Percent | Weekly sales of grapefruit per retail outlet, by each type of store | | | | | | Average 494 2/ outlets Pounds |
|---|---|---------|---------------------|---------|---------------------------------|---------|--|
| | 227 fruit and vegetable stores Pounds | | Grocery stores | | 33 meat markets Pounds | | |
| | 120 independents Pounds | | 66 chains Pounds | | 43 pushcart operators Pounds | | |
| | | | | | | | |
| Loss sales | 67 | | 72 | 46 | 320 | 133 | 85 |
| Less than 15 | 128 | | 90 | 175 | 28 | 238 | 140 |
| 15 - 19 | 85 | | 72 | 79 | 58 | 419 | 119 |
| 20 - 24 | 100 | | 147 | 94 | 51 | 480 | 154 |
| 25 - 29 | 106 | | 79 | 110 | 126 | 347 | 121 |
| 30 - 34 | 129 | | 123 | 80 | 176 | 240 | 128 |
| 35 - 39 | 152 | | 96 | 108 | 283 | 339 | 152 |
| 40 - 49 | 146 | | 101 | 169 | 96 | 720 | 148 |
| 50 or more | 123 | | 73 | 480 | 98 | 160 | 121 |
| Proportion of stores in each classification | | | | | | | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Loss sales | 8 | 8 | | 3 | 3 | 7 | 7 |
| Less than 15 | 14 | 12 | | 15 | 6 | 23 | 14 |
| 15 - 19 | 12 | 8 | | 14 | 6 | 14 | 11 |
| 20 - 24 | 14 | 13 | | 17 | 9 | 19 | 14 |
| 25 - 29 | 11 | 16 | | 26 | 18 | 14 | 15 |
| 30 - 34 | 11 | 10 | | 7 | 15 | 2 | 10 |
| 35 - 39 | 13 | 14 | | 11 | 3 | 14 | 13 |
| 40 - 49 | 11 | 13 | | 6 | 28 | 5 | 11 |
| 50 or more | 6 | 6 | | 1 | 12 | 2 | 5 |

^{1/} The above data include only those stores which actually handled grapefruit. Stores handling grapefruit were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 54%; independent grocery stores, 30%; chain grocery stores, 25%; meat markets, 52%; pushcart operators, 14%; wagon hucksters, 7%; and all retail outlets, 32%.

^{2/} Includes 5 hucksters handling grapefruit, but too few for any comparisons.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 21.- Peaches: RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin Percent | Weekly sales of peaches per retail outlet, by each type of store | | | | | | | | Average 1,268 outlets Pounds |
|---|--|-------------------------------|-------------------------|-------------------------|---------------------------------|--|---|---------|---------------------------------------|
| | 401 fruit and vegetable stores Pounds | Grocery stores | | | 61 meat markets Pounds | 182 pushcart operators Pounds | 59 wagon or motor hucksters Pounds | | |
| | | 312 independents Pounds | 253 chains Pounds | 253 chains Pounds | | | | | |
| | | | | | | | | | |
| Loss sales | 252 | 216 | 591 | 896 | 471 | 888 | 430 | | |
| Less than 15 | 370 | 269 | 567 | 451 | 594 | 870 | 471 | | |
| 15 - 19 | 436 | 232 | 330 | 160 | 898 | 900 | 499 | | |
| 20 - 24 | 440 | 242 | 280 | 446 | 1,277 | 929 | 489 | | |
| 25 - 29 | 436 | 224 | 314 | 504 | 990 | 1,205 | 482 | | |
| 30 - 34 | 411 | 245 | 218 | 568 | 623 | 811 | 414 | | |
| 35 - 39 | 331 | 221 | 356 | 467 | 1,016 | 1,024 | 409 | | |
| 40 - 49 | 446 | 197 | 326 | 508 | 734 | 528 | 358 | | |
| 50 or more | 316 | 146 | 413 | 195 | 1,779 | 384 | 431 | | |
| Proportion of stores in each classification | | | | | | | | | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | |
| Loss sales | 11 | 6 | 19 | 5 | 15 | 7 | 11 | | |
| Less than 15 | 18 | 12 | 29 | 9 | 21 | 13 | 19 | | |
| 15 - 19 | 8 | 7 | 12 | 5 | 17 | 7 | 10 | | |
| 20 - 24 | 12 | 13 | 18 | 11 | 11 | 24 | 14 | | |
| 25 - 29 | 13 | 13 | 7 | 13 | 9 | 17 | 11 | | |
| 30 - 34 | 13 | 13 | 4 | 18 | 9 | 17 | 11 | | |
| 35 - 39 | 12 | 13 | 5 | 18 | 9 | 5 | 10 | | |
| 40 - 49 | 9 | 17 | 4 | 10 | 5 | 5 | 9 | | |
| 50 or more | 4 | 6 | 2 | 11 | 4 | 5 | 5 | | |

1/ The above data include only those stores which actually handled peaches. Stores handling peaches were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 96%; independent grocery stores, 77%; chain grocery stores 96%; meat markets, 97%; pushcart operators, 57%; wagon or motor hucksters, 79%; and all retail outlets, 82%.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 22.-- Bananas: RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1933

| Range in average gross margin Percent | Weekly sales of bananas per retail outlet, by each type of store | | | | | | Average 904 outlets Pounds |
|---|--|----------------------------|----------------------|---------------------------|---------------------------------|--------------------------------------|-------------------------------|
| | 540 fruit and vegetable stores Pounds | Grocery stores | | 50 meat markets Pounds | 20 pushcart operators Pounds | 9 wagon or motor hucksters Pounds | |
| | | 262 independents Pounds | 223 chains Pounds | | | | |
| Loss sales | 235 | 153 | 132 | 239 | 234 | 385 | 204 |
| Less than 15 | 224 | 161 | 232 | 388 | 1,485 | 1,183 | 247 |
| 15 - 19 | 200 | 159 | 133 | 541 | 3,575 | ----- | 209 |
| 20 - 24 | 281 | 157 | 175 | 529 | 1,265 | ----- | 233 |
| 25 - 29 | 298 | 118 | 168 | 352 | ----- | 220 | 199 |
| 30 - 34 | 237 | 160 | 108 | 501 | 1,998 | 165 | 308 |
| 35 - 39 | 182 | 176 | 90 | 21 | 1,100 | 110 | 192 |
| 40 - 49 | 429 | 173 | 309 | 463 | 1,821 | 1,650 | 452 |
| 50 or more | 215 | 85 | 150 | 68 | 165 | ----- | 159 |
| Proportion of stores in each classification | | | | | | | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Loss sales | 34 | 23 | 9 | 26 | 20 | 22 | 24 |
| Less than 15 | 20 | 20 | 30 | 20 | 15 | 23 | 22 |
| 15 - 19 | 10 | 8 | 23 | 12 | 5 | ----- | 13 |
| 20 - 24 | 9 | 9 | 23 | 8 | 10 | ----- | 12 |
| 25 - 29 | 6 | 11 | 9 | 10 | ----- | 22 | 8 |
| 30 - 34 | 7 | 9 | 3 | 14 | 15 | 11 | 7 |
| 35 - 39 | 4 | 7 | 1 | 2 | 5 | 11 | 4 |
| 40 - 49 | 5 | 9 | 3 | 4 | 25 | 11 | 6 |
| 50 or more | 5 | 4 | 2/ | 4 | 5 | ----- | 4 |

1/ The above data include only those stores which actually handled bananas. Stores handling bananas were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 81%; independent grocery stores, 65%; chain grocery stores, 84%; meat markets, 79%; pushcart operators, 6%; wagon or motor hucksters, 12%; and all retail outlets, 59%.

2/ Less than one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 23.- Pears (Western): RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin, Percent | Weekly sales of western pears per retail outlet, by type of store | | | | | | |
|--|---|----------------------------|----------------------|---------------------------|----------------------------------|---------------------------------------|-------------------------------|
| | 387 fruit and vegetable stores Pounds | Grocery stores | | 55 meat markets Pounds | 141 pushcart operators Pounds | 24 wagon or motor hucksters Pounds | Average 947 outlets Pounds |
| | | 236 independents Pounds | 114 chains Pounds | | | | |
| Loss sales | 137 | 92 | 244 | 184 | 471 | 322 | 227 |
| Less than 15 | 171 | 109 | 111 | 313 | 449 | 216 | 217 |
| 15 - 19 | 278 | 204 | 111 | 187 | 516 | 245 | 273 |
| 20 - 24 | 187 | 132 | 84 | 141 | 349 | 207 | 186 |
| 25 - 29 | 148 | 125 | 99 | 284 | 345 | 736 | 168 |
| 30 - 34 | 212 | 108 | 87 | 330 | 368 | --- | 187 |
| 35 - 39 | 211 | 110 | 80 | 33 | 299 | 414 | 152 |
| 40 - 49 | 205 | 90 | 144 | 92 | 199 | 690 | 169 |
| 50 or more | 396 | 57 | 138 | 207 | 46 | --- | 191 |
| Loss sales | Proportion of stores in each classification | | | | | | |
| | Percent | Percent | | Percent | Percent | Percent | Percent |
| | | Percent | Percent | | | | |
| Loss sales | 7 | 7 | 9 | 7 | 12 | 8 | 8 |
| Less than 15 | 24 | 21 | 24 | 11 | 36 | 46 | 25 |
| 15 - 19 | 16 | 12 | 19 | 14 | 17 | 13 | 15 |
| 20 - 24 | 20 | 15 | 16 | 25 | 18 | 17 | 19 |
| 25 - 29 | 19 | 16 | 11 | 22 | 6 | 8 | 15 |
| 30 - 34 | 6 | 13 | 8 | 11 | 7 | --- | 8 |
| 35 - 39 | 3 | 8 | 4 | 4 | 1 | 4 | 4 |
| 40 - 49 | 4 | 5 | 7 | 2 | 2 | 4 | 4 |
| 50 or more | 1 | 3 | 2 | 4 | 1 | --- | 2 |

1/ The above data include only those stores which actually handled western pears. Stores handling western pears were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 93%; independent grocery stores, 56%; chain grocery stores, 43%; meat markets, 87%; pushcart operators, 44%; wagon or motor hucksters, 32%; all retail outlets, 61%.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 24.- Grapes (Western): RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin Percent | Weekly sales of western grapes per retail outlet, by each type of store | | | | | | | Average 910 outlets Pounds |
|---|---|----------------------------|----------------------|---------------------------|----------------------------------|---------------------------------------|---------|-------------------------------|
| | 361 fruit and vegetable stores Pounds | Grocery stores | | 46 meat markets Pounds | 136 pushcart operators Pounds | 29 wagon or motor hucksters Pounds | | |
| | | 188 independents Pounds | 150 chains Pounds | | | | | |
| Loss sales | 103 | 110 | 312 | 159 | 368 | 140 | 205 | |
| Less than 15 | 142 | 73 | 340 | 352 | 287 | 230 | 214 | |
| 15 - 19 | 138 | 113 | 92 | 133 | 301 | 448 | 163 | |
| 20 - 24 | 153 | 91 | 73 | 148 | 301 | 196 | 146 | |
| 25 - 29 | 206 | 108 | 61 | 105 | 418 | 175 | 194 | |
| 30 - 34 | 141 | 112 | 54 | 208 | 352 | 322 | 143 | |
| 35 - 39 | 115 | 95 | 84 | 362 | 455 | 84 | 149 | |
| 40 - 49 | 236 | 62 | 74 | 112 | --- | --- | 134 | |
| 50 or more | 126 | 95 | 70 | 266 | 1,204 | --- | 149 | |
| Proportion of stores in each classification | | | | | | | | |
| Loss sales | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| | 11 | 7 | 13 | 7 | 15 | 3 | 11 | |
| Less than 15 | 18 | 15 | 22 | 15 | 34 | 45 | 21 | |
| | 9 | 11 | 12 | 9 | 15 | 3 | 11 | |
| 15 - 19 | 15 | 20 | 13 | 22 | 14 | 18 | 16 | |
| 20 - 24 | 18 | 13 | 13 | 9 | 13 | 14 | 14 | |
| 25 - 29 | 12 | 13 | 13 | 15 | 5 | 14 | 12 | |
| 30 - 34 | 10 | 8 | 6 | 15 | 3 | 3 | 8 | |
| 35 - 39 | 5 | 10 | 5 | 4 | --- | --- | 5 | |
| 40 - 49 | 2 | 3 | 4 | 4 | 1 | --- | 2 | |
| 50 or more | | | | | | | | |

1/ The above data include only those stores which actually handled western grapes. Stores handling western grapes were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 86%; independent grocery stores, 46%; chain grocery stores, 57%; meat markets, 73%; pushcart operators, 43%; wagon or motor hucksters, 39%; and all retail outlets, 59%.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 25.- Watermelons: RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin | Weekly sales of watermelons per retail outlet, by each type of store | | | | | | Average 474 2/ outlets |
|-------------------------------|--|--|---------------------------|----------------------|---------------------------|---------------------------------------|---------------------------|
| | Percent | 152 fruit and vegetable stores Pounds | Grocery stores | | 26 meat markets Pounds | 16 wagon or motor hucksters Pounds | |
| | | | 92 independents Pounds | 187 chains Pounds | | | |
| | | | | | | | |
| Loss sales | | 300 | 212 | | 171 | --- | 205 |
| Less than 15 | | 264 | 161 | | 422 | 360 | 549 |
| 15 - 19 | | 224 | 338 | | 533 | 720 | 654 |
| 20 - 24 | | 444 | 386 | | 645 | 326 | 609 |
| 25 - 29 | | 340 | 259 | | 269 | 390 | 310 |
| 30 - 34 | | 454 | 256 | | 362 | 314 | 823 |
| 35 - 39 | | 565 | 304 | | 243 | 240 | 898 |
| 40 - 49 | | 266 | 307 | | 330 | 336 | 609 |
| 50 or more | | 256 | 178 | | 225 | --- | 230 |
| Loss sales | Proportion of stores in each classification | | | | | | Percent |
| | Percent | Percent | | Percent | Percent | Percent | |
| | | Percent | Percent | | | | |
| | | | | | | | |
| Loss sales | 5 | 3 | 12 | --- | --- | 7 | |
| Less than 15 | 5 | 5 | 14 | 4 | 6 | 9 | |
| 15 - 19 | 8 | 12 | 13 | 12 | 6 | 11 | |
| 20 - 24 | 11 | 19 | 19 | 19 | 6 | 16 | |
| 25 - 29 | 26 | 23 | 13 | 15 | 6 | 19 | |
| 30 - 34 | 15 | 20 | 12 | 38 | 38 | 17 | |
| 35 - 39 | 7 | 3 | 5 | 4 | 25 | 6 | |
| 40 - 49 | 15 | 10 | 8 | 8 | 13 | 10 | |
| 50 or more | 8 | 5 | 4 | --- | --- | 5 | |

1/ The above data include only those stores which actually handled watermelons. The proportions of each type of store included in this survey which handled watermelons were as follows: Fruit and vegetable stores, 36%; independent grocery stores, 23%; chain stores, 71%; meat markets, 41%; wagon hucksters, 21%; and all retail outlets, 31%.

2/ Includes one pushcart operator that handled watermelons; i.e., 600 lbs. at a 30% margin.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 26.- Cantaloupes: RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin | Weekly sales of cantaloupes per retail outlet, by each type of store | | | | | | | Average 563 outlets | | | |
|---|--|---------|------------------|------------|-----------------|---------|-----------------------|---------------------|-----------------------------|---------|---------|
| | 205 fruit and vegetable stores | | Grocery stores | | 34 meat markets | | 53 pushcart operators | | 23 wagon or motor hucksters | | |
| | Pounds | Percent | 122 independents | 126 chains | Pounds | Percent | Pounds | | Percent | Pounds | Percent |
| Loss sales | 211 | | 181 | 567 | 1,700 | 674 | 238 | 423 | | | |
| Less than 15 | 248 | | 247 | 337 | 102 | 507 | 290 | 303 | | | |
| 15 - 19 | 261 | | 187 | 301 | 184 | 192 | 918 | 270 | | | |
| 20 - 24 | 281 | | 210 | 864 | 204 | 1,235 | 1,020 | 537 | | | |
| 25 - 29 | 313 | | 202 | 261 | 941 | 1,360 | 1,519 | 483 | | | |
| 30 - 34 | 369 | | 142 | 239 | 531 | 356 | 1,593 | 352 | | | |
| 35 - 39 | 249 | | 204 | 1,020 | 238 | 169 | --- | 304 | | | |
| 40 - 49 | 491 | | 353 | 136 | 1,737 | 905 | 1,063 | 633 | | | |
| 50 or more | 621 | | 334 | 291 | 601 | 623 | --- | 497 | | | |
| Proportion of stores in each classification | | | | | | | | | | | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent | |
| Loss sales | 13 | 7 | 30 | 3 | 11 | 9 | 15 | | | | |
| Less than 15 | 17 | 16 | 21 | 6 | 23 | 9 | 17 | | | | |
| 15 - 19 | 15 | 7 | 8 | 15 | 6 | 9 | 11 | | | | |
| 20 - 24 | 7 | 14 | 14 | 12 | 11 | 4 | 10 | | | | |
| 25 - 29 | 9 | 12 | 10 | 17 | 2 | 26 | 10 | | | | |
| 30 - 34 | 11 | 13 | 3 | 9 | 4 | 17 | 9 | | | | |
| 35 - 39 | 7 | 7 | 2 | 6 | 6 | --- | 6 | | | | |
| 40 - 49 | 12 | 13 | 6 | 15 | 26 | --- | 13 | | | | |
| 50 or more | 9 | 11 | 6 | 17 | 11 | --- | 9 | | | | |

1/ The above data include only those stores which actually handled cantaloupes. Stores handling cantaloupes were in the following proportions to total stores of each type included in this survey: fruit and vegetable stores, 49%; independent grocery stores, 30%; chain grocery stores, 48%; meat markets, 54%; pushcart operators, 17%; wagon or motor hucksters, 31%; all retail outlets, 36%.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 27.-- Honeydew Melons: RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Range in average gross margin Percent | Weekly sales of honeydew melons per retail outlet, by each type of store | | | | | | |
|---|--|----------------------------|----------------------|---------------------------|---------------------------------|---------------------------------------|-------------------------------|
| | 321 fruit and vegetable stores Pounds | Grocery stores | | 46 meat markets Pounds | 58 pushcart operators Pounds | 22 wagon or motor hucksters Pounds | Average 800 outlets Pounds |
| | | 178 independents Pounds | 175 chains Pounds | | | | |
| Loss sales | 122 | 87 | 203 | 100 | 234 | 440 | 158 |
| Less than 15 | 153 | 123 | 198 | 322 | 305 | 290 | 186 |
| 15 - 19 | 159 | 113 | 193 | 80 | 355 | 137 | 173 |
| 20 - 24 | 177 | 169 | 134 | 149 | 1,053 | 693 | 233 |
| 25 - 29 | 162 | 127 | 180 | 136 | 825 | --- | 204 |
| 30 - 34 | 174 | 137 | 140 | 202 | 350 | 147 | 173 |
| 35 - 39 | 183 | 98 | 420 | 300 | 187 | 227 | 183 |
| 40 - 49 | 179 | 141 | --- | 183 | 300 | --- | 178 |
| 50 or more | 160 | --- | --- | 120 | --- | --- | 152 |
| Proportion of stores in each classification | | | | | | | |
| Loss sales | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Less than 15 | 12 | 11 | 25 | 7 | 12 | 9 | 14 |
| 15 - 19 | 22 | 16 | 41 | 24 | 21 | 18 | 25 |
| 20 - 24 | 15 | 11 | 12 | 11 | 21 | 31 | 14 |
| 25 - 29 | 14 | 14 | 10 | 15 | 10 | 14 | 13 |
| 30 - 34 | 15 | 18 | 7 | 7 | 14 | --- | 13 |
| 35 - 39 | 10 | 16 | 4 | 17 | 10 | 14 | 10 |
| 40 - 49 | 6 | 6 | 1 | 4 | 5 | 14 | 5 |
| 50 or more | 5 | 8 | --- | 13 | 7 | --- | 5 |
| 1/ | 1 | --- | --- | 2 | --- | --- | 1 |

The above data include only those stores which actually handled peaches. Stores handling peaches were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 77%; independent grocery stores, 44%; chain grocery stores, 66%; meat markets, 73%; pushcart operators, 18%; wagon or motor hucksters, 29%; and all retail outlets, 52%.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 28.-- Honeyball Melons: RELATION OF GROSS RETAIL MARGIN TO QUANTITY SOLD WEEKLY PER OUTLET ^{1/} NEW YORK CITY, AUGUST 1939

| Range in average gross margin | Weekly sales of honeyball melons per retail outlet, by each type of store | | | | | | Average 197 2/ retail outlets |
|---|---|-----------------|-----------|-----------------|-----------------------|---------|----------------------------------|
| | 105 fruit and vegetable stores | Grocery stores | | 13 meat markets | 15 pushcart operators | Pounds | |
| | | 41 independents | 19 chains | | | | |
| Percent | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Founds |
| Less sales | 89 | 82 | --- | 41 | 156 | --- | 92 |
| Less than 15 | 158 | 132 | 134 | 147 | 391 | --- | 157 |
| 15 - 19 | 119 | 136 | 102 | 408 | 453 | --- | 174 |
| 20 - 24 | 202 | 137 | 181 | 340 | 714 | --- | 230 |
| 25 - 29 | 102 | 88 | 68 | --- | 204 | --- | 102 |
| 30 - 34 | 126 | 54 | 34 | --- | 340 | --- | 130 |
| 35 - 39 | 170 | 79 | --- | 68 | --- | --- | 112 |
| 40 - 49 | 70 | 68 | 238 | --- | 34 | --- | 93 |
| 50 or more | 1,394 | 204 | --- | --- | --- | --- | 997 |
| Proportion of stores in each classification | | | | | | | |
| | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Less sales | 22 | 12 | --- | 23 | 33 | --- | 19 |
| Less than 15 | 27 | 20 | 53 | 46 | 13 | --- | 28 |
| 15 - 19 | 13 | 10 | 11 | 8 | 20 | --- | 12 |
| 20 - 24 | 15 | 24 | 16 | 8 | 13 | --- | 17 |
| 25 - 29 | 2 | 12 | 5 | --- | 7 | --- | 4 |
| 30 - 34 | 9 | 2 | 5 | --- | 7 | --- | 7 |
| 35 - 39 | 4 | 8 | --- | 15 | --- | --- | 5 |
| 40 - 49 | 6 | 10 | 10 | --- | 7 | --- | 7 |
| 50 or more | 2 | 2 | --- | --- | --- | --- | 1 |

^{1/} The above data include only those stores which actually handled honeyball melons. Stores handling honeyball melons were in the following proportions to total stores of each type included in this survey: fruit and vegetable stores, 25%; independent grocery stores, 10%; chain grocery stores, 7%; meat markets, 21%; pushcart operators, 5%; wagon or motor hucksters, 5%; and all retail outlets, 13%.

^{2/} Includes 4 wagon or motor hucksters, too few sales for comparisons.

Source: Data obtained from chain stores and independent retailers in New York City.

Margins on Other Fruits

Space does not permit the detailed discussion of other fruits. Bananas sold in largest volume at a margin of 40 to 49 percent (table 22); western pears at a margin of 15 to 19 percent (table 23); western grapes at the lowest margin (table 24); watermelons at 35-39 percent margin (table 25); cantaloupes at 40 to 49 percent margin (table 26); honeydew melons at 20 to 24 percent margin (table 27); and honeyball melons at 50 percent or more gross margin (table 28).

Analysis of tables 16 to 28 will indicate that the experiences of each type of retail outlet often differed markedly from the average for all types.

INCOME AREAS AND GROSS RETAIL MARGINS

It is commonly assumed that prices and gross margins are all low in low-income areas and all high in high-income areas. Space permits only limited analysis of this assumption. In the case of eastern apples, the range in gross margins taken was about the same in all four income areas (table 29). Sixty-six percent of the outlets in the low-income areas realized gross margins of 40 percent or more, and maximum sales occurred at 60 to 69 percent; in the medium-low income areas, maximum sales were reported on a margin of 50 to 59 percent, and 47 percent of the outlets realized 40 percent or more gross margin. In the medium-high income areas, largest sales per outlet occurred at 60 to 69 percent gross margin, and 64 percent of the outlets obtained a gross margin of 40 percent or more. In the highest-income areas, maximum sales were attained by those outlets charging 50 percent or more gross margin. None of these high volume groups of outlets sold at lowest prices, but their prices were comparatively low in the low and medium-low areas and comparatively high in the medium-high and high income areas.

When considering the variations in realized retail prices and gross margins between income areas, and between stores in the same income area, it should be kept in mind that data were not obtained from all stores during the same week in August of 1939. The survey of retail fresh fruits outlets was conducted during the entire month, and data for the past week were obtained at each store on whatever day during the month an enumerator happened to call at the store. For this reason, changes in both jobbing and retail prices of some commodities during the month partially account for the wide distribution of stores as far as realized retail prices and gross margins are concerned. In addition, relationships pertaining to these prices and margins which seem to exist should also be interpreted in the light of this limitation on the data which is mentioned above. A later publication will contain measurements of the changes that occurred during the month.

In the case of California oranges, the relationships are inconsistent. In the lowest-income areas, optimum sales occurred when a gross margin of 30 to 34 percent was realized (an average price of 5.6 cents per pound). In the medium-low income areas, however, largest sales took place at a gross margin of about 11 percent and an average price of 5.6 cents per pound (table 30). In both the medium-high and high income areas, maximum sales were reported by outlets which showed a loss in handling oranges, at retail prices of 5.8 to 5.9 cents per pound. In both of the higher income areas, however, and especially in the highest income area, substantial volumes were also sold at gross margins ranging from 30 to 50 percent or more.

Peach sales per outlet were largest in low-income areas where the gross margin was 50 percent or more and the average realized price was lowest, but relatively large sales were reported at margins ranging from 15 to 24 percent and at higher prices per pound (table 31). Maximum sales in other income areas were as follows: medium-low income and medium-high, at 15 to 19 percent gross margin; and high income, at less than 15 percent gross margin. Ranges in gross margin were from less than 15 percent to 50 percent or more in each of the four areas.

Bananas sales per outlet showed little relationship to percentage gross margin. In the lowest income areas, largest sales per outlet did not occur either at lowest realized price per pound or at lowest gross margin, but occurred at a gross margin of 30 to 34 percent (table 31). In all other income areas, largest sales per outlet were at a gross margin of 40 to 49 percent. Lowest prices did not accompany highest sales in any of the four income areas.

Cantaloupe sales seem to have had much in common with bananas, i.e., maximum sales per outlet seem to have been at relatively high gross margins (table 32). Watermelon sales were largest per outlet at 30 to 39 percent gross margin both in low and medium-low income areas; at less than 20 percent in medium-high income areas; and at 40 to 49 percent in high income areas.

It should be obvious from the foregoing that great care should be used in interpreting these or any other data dealing with gross margins on fruit.

It should be clearly understood that these data do not indicate that the way to increase fruit consumption is to raise prices and margins. These data do indicate that much more careful study of retailer and consumer habits is necessary before any definite conclusions can be laid down. These data do suggest, however, that cooperative associations and growers may have over-emphasized the degree to which housewives have any knowledge of costs and selling prices, and thus of the magnitude of gross margins. It is probable

Table 29.- Apples: RELATION OF INCOME AREA AND VARIATIONS IN GROSS RETAIL MARGIN TO QUANTITY OF APPLES SOLD WEEKLY, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in gross margin Percent | Eastern apples | | | | Western apples | | | |
|--|------------------------------------|------------------------------------|---------------------------------------|------------------------------|------------------------------------|------------------------------------|---------------------------------------|------------------------------|
| | Proportion of outlets in come area | Quantity sold in weekly per outlet | Average realized retail price per lb. | Average gross margin per lb. | Proportion of outlets in come area | Quantity sold in weekly per outlet | Average realized retail price per lb. | Average gross margin per lb. |
| | Percent | Pounds | Cents | Cents | Percent | Pounds | Cents | Cents |
| | | | | | | | | |
| Low Income areas ^{1/} | | | | | | | | |
| Loss | 3 | 36 | 2.4 | -0.5 | 6 | 484 | 3.0 | -0.1 |
| Less than 15 | 3 | 228 | 2.4 | 0.3 | 9 | 37 | 5.8 | 0.6 |
| 15 - 19 | 3 | 394 | 2.2 | 0.4 | 3 | 88 | 3.8 | 0.7 |
| 20 - 24 | 2 | 112 | 3.3 | 0.7 | 9 | 125 | 4.5 | 1.0 |
| 25 - 29 | 3 | 202 | 2.2 | 0.6 | 11 | 198 | 5.4 | 1.4 |
| 30 - 34 | 12 | 252 | 2.0 | 0.7 | 25 | 178 | 5.2 | 1.7 |
| 35 - 39 | 8 | 222 | 2.7 | 1.0 | 3 | 22 | 7.7 | 2.7 |
| 40 - 49 | 19 | 350 | 3.4 | 1.6 | 20 | 27 | 6.1 | 2.6 |
| 50 - 59 | 26 | 281 | 2.7 | 1.4 | 11 | 20 | 5.4 | 2.9 |
| 60 - 69 | 15 | 477 | 2.7 | 1.8 | 3 | 44 | 7.0 | 4.3 |
| 70 or more | 6 | 313 | 3.7 | 2.8 | - | - | - | - |
| Medium-Low Income areas ^{1/} | | | | | | | | |
| Loss | 1 | 80 | 3.1 | -0.1 | 6 | 40 | 4.7 | -1.1 |
| Less than 15 | 5 | 172 | 2.4 | 0.2 | 11 | 40 | 5.2 | 0.6 |
| 15 - 19 | 3 | 120 | 3.2 | 0.5 | 4 | 44 | 7.6 | 1.2 |
| 20 - 24 | 7 | 125 | 3.8 | 0.8 | 6 | 59 | 5.3 | 1.2 |
| 25 - 29 | 8 | 84 | 3.7 | 1.0 | 6 | 220 | 6.0 | 1.5 |
| 30 - 34 | 9 | 152 | 3.8 | 1.3 | 6 | 40 | 5.5 | 1.7 |
| 35 - 39 | 20 | 193 | 3.1 | 1.2 | 8 | 38 | 7.3 | 2.6 |
| 40 - 49 | 25 | 193 | 3.7 | 1.7 | 21 | 51 | 7.5 | 3.3 |
| 50 - 59 | 16 | 403 | 2.9 | 1.5 | 13 | 38 | 7.7 | 4.1 |
| 60 - 69 | 5 | 236 | 3.4 | 2.2 | 17 | 64 | 9.3 | 6.2 |
| 70 or more | 1 | 48 | 8.8 | 6.7 | 2 | 11 | 9.1 | 6.4 |
| Medium-High Income areas ^{1/} | | | | | | | | |
| Loss | 1 | 156 | 2.3 | -0.6 | 5 | 11 | 4.4 | -0.6 |
| Less than 15 | 3 | 187 | 2.6 | 0.2 | 5 | 26 | 6.0 | 0.8 |
| 15 - 19 | ^{2/} 48 | | 3.3 | 0.6 | 12 | 69 | 5.8 | 0.9 |
| 20 - 24 | 5 | 224 | 3.0 | 0.7 | 3 | 46 | 5.5 | 1.2 |
| 25 - 29 | 5 | 170 | 2.8 | 0.8 | 19 | 54 | 5.8 | 1.6 |
| 30 - 34 | 11 | 152 | 3.4 | 1.1 | 13 | 46 | 5.9 | 1.9 |
| 35 - 39 | 11 | 177 | 3.4 | 1.2 | 12 | 47 | 7.5 | 2.7 |
| 40 - 49 | 28 | 255 | 3.3 | 1.5 | 19 | 68 | 7.1 | 3.1 |
| 50 - 59 | 29 | 210 | 3.7 | 2.0 | 7 | 48 | 8.0 | 4.3 |
| 60 - 69 | 6 | 262 | 4.4 | 3.0 | 5 | 147 | 7.5 | 4.8 |
| 70 or more | 1 | 168 | 6.2 | 4.4 | - | - | - | - |
| High Income areas ^{1/} | | | | | | | | |
| Loss | 1 | 36 | 1.9 | -0.9 | 4 | 32 | 5.6 | -0.3 |
| Less than 15 | 2 | 90 | 3.3 | 0.4 | 11 | 63 | 5.7 | 0.6 |
| 15 - 19 | 2 | 161 | 3.6 | 0.6 | 1 | 11 | 5.5 | 1.0 |
| 20 - 24 | 2 | 113 | 3.7 | 0.8 | 4 | 80 | 6.7 | 1.6 |
| 25 - 29 | 5 | 208 | 3.3 | 0.9 | 7 | 79 | 6.6 | 1.7 |
| 30 - 34 | 11 | 143 | 3.8 | 1.3 | 7 | 57 | 6.6 | 2.0 |
| 35 - 39 | 14 | 224 | 3.3 | 1.2 | 18 | 61 | 7.4 | 2.7 |
| 40 - 49 | 28 | 182 | 4.4 | 2.0 | 27 | 59 | 7.9 | 3.5 |
| 50 - 59 | 24 | 228 | 5.0 | 2.7 | 13 | 82 | 9.6 | 5.4 |
| 60 - 69 | 8 | 239 | 5.3 | 3.4 | 8 | 70 | 9.2 | 6.0 |
| 70 or more | 3 | 318 | 6.0 | 4.5 | - | - | - | - |

^{1/} For explanation of income areas, see table 5, page 11.

^{2/} Less than one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 30.-- Oranges: RELATION OF INCOME AREA AND VARIATIONS IN GROSS RETAIL MARGIN TO QUANTITY OF ORANGES SOLD WEEKLY, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| California oranges | | | | | Florida oranges | | | | |
|--|------------------------------------|---------------------------------|--|------------------------------|-----------------------|------------------------------------|---------------------------------|--|------------------------------|
| Range in gross margin | Proportion of outlets in come area | Quantity sold weekly per outlet | Average real-ized retail price per lb. | Average gross margin per lb. | Range in gross margin | Proportion of outlets in come area | Quantity sold weekly per outlet | Average real-ized retail price per lb. | Average gross margin per lb. |
| | Percent | Pounds | Cents | Cents | | Percent | Pounds | Cents | Cents |
| | | | | | | | | | |
| Low Income areas ^{1/} | | | | | | | | | |
| Loss | 6 | 233 | 4.9 | -0.6 | 20 | 248 | 2.7 | -0.5 | |
| Less than 15 | 30 | 362 | 5.4 | 0.5 | 29 | 505 | 3.2 | 0.3 | |
| 15 - 19 | 19 | 344 | 6.1 | 1.0 | 14 | 494 | 3.6 | 0.6 | |
| 20 - 24 | 16 | 219 | 6.9 | 1.5 | 11 | 373 | 4.0 | 0.8 | |
| 25 - 29 | 14 | 204 | 6.7 | 1.8 | 9 | 265 | 3.8 | 1.0 | |
| 30 - 34 | 5 | 377 | 5.6 | 1.8 | 3 | 180 | 4.4 | 1.4 | |
| 35 - 39 | 4 | 315 | 6.1 | 2.2 | 3 | 104 | 5.0 | 1.8 | |
| 40 - 49 | 4 | 132 | 8.3 | 3.6 | 7 | 420 | 3.5 | 1.6 | |
| 50 or more | 2 | 118 | 7.7 | 4.0 | 4 | 478 | 3.8 | 2.0 | |
| Medium-Low Income areas ^{1/} | | | | | | | | | |
| Loss | 4 | 280 | 4.3 | -0.4 | 21 | 269 | 2.6 | -0.5 | |
| Less than 15 | 20 | 445 | 5.6 | 0.6 | 24 | 862 | 3.0 | 0.3 | |
| 15 - 19 | 15 | 232 | 5.5 | 0.9 | 9 | 920 | 3.5 | 0.6 | |
| 20 - 24 | 18 | 309 | 6.4 | 1.4 | 15 | 249 | 4.5 | 1.0 | |
| 25 - 29 | 16 | 261 | 7.1 | 1.9 | 13 | 336 | 3.9 | 1.0 | |
| 30 - 34 | 8 | 220 | 7.6 | 2.4 | 6 | 195 | 5.3 | 1.7 | |
| 35 - 39 | 8 | 130 | 6.9 | 2.5 | 6 | 210 | 5.0 | 1.9 | |
| 40 - 49 | 8 | 215 | 8.9 | 3.9 | 3 | 210 | 5.3 | 2.5 | |
| 50 or more | 3 | 111 | 9.0 | 4.9 | 3 | 150 | 7.2 | 4.3 | |
| Medium-High Income areas ^{1/} | | | | | | | | | |
| Loss | 7 | 526 | 5.9 | -0.7 | 18 | 252 | 3.8 | -0.4 | |
| Less than 15 | 22 | 315 | 6.3 | 0.6 | 31 | 325 | 3.9 | 0.3 | |
| 15 - 19 | 15 | 354 | 7.1 | 1.2 | 14 | 428 | 3.5 | 0.5 | |
| 20 - 24 | 19 | 303 | 7.0 | 1.6 | 9 | 288 | 3.8 | 0.9 | |
| 25 - 29 | 12 | 382 | 7.2 | 1.9 | 4 | 165 | 5.3 | 1.4 | |
| 30 - 34 | 8 | 320 | 7.4 | 2.4 | 7 | 158 | 5.0 | 1.7 | |
| 35 - 39 | 7 | 295 | 7.6 | 2.8 | 4 | 530 | 4.6 | 1.7 | |
| 40 - 49 | 8 | 210 | 8.8 | 3.9 | 9 | 160 | 5.8 | 2.6 | |
| 50 or more | 2 | 146 | 8.5 | 4.6 | 4 | 450 | 6.0 | 3.3 | |
| High Income areas ^{1/} | | | | | | | | | |
| Loss | 5 | 832 | 5.8 | -0.6 | 6 | 210 | 4.2 | -0.3 | |
| Less than 15 | 16 | 672 | 6.6 | 0.5 | 27 | 219 | 4.3 | 0.4 | |
| 15 - 19 | 15 | 477 | 7.3 | 1.2 | 13 | 424 | 4.7 | 0.8 | |
| 20 - 24 | 22 | 462 | 7.2 | 1.6 | 19 | 288 | 5.2 | 1.2 | |
| 25 - 29 | 22 | 480 | 7.6 | 2.0 | 6 | 120 | 5.8 | 1.6 | |
| 30 - 34 | 9 | 538 | 7.9 | 2.5 | 11 | 187 | 5.6 | 1.6 | |
| 35 - 39 | 6 | 483 | 8.7 | 3.2 | 10 | 422 | 4.6 | 1.6 | |
| 40 - 49 | 4 | 441 | 9.5 | 4.2 | 8 | 135 | 6.8 | 2.8 | |
| 50 or more | 1 | 607 | 11.6 | 7.4 | - | - | - | - | - |

^{1/} For explanation of income areas, see table 5, page 11.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 31.-- Peaches and Bananas: RELATION OF INCOME AREA AND VARIATIONS IN GROSS RETAIL MARGIN TO QUANTITY OF PEACHES AND BANANAS SOLD WEEKLY, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Peaches | | | | | Bananas | | | | |
|-----------------------------|------------------------------------|--|---|------------------------------|-----------------------|------------------------------------|--|---|------------------------------|
| Range in gross margin | Proportion of outlets in come area | Quantity sold in in- weekly per outlet | Average real- ized retail price per lb. | Average gross margin per lb. | Range in gross margin | Proportion of outlets in come area | Quantity sold in in- weekly per outlet | Average real- ized retail price per lb. | Average gross margin per lb. |
| | Percent | Percent Pounds | Cents | Cents | | Percent | Percent Pounds | Cents | Cents |
| Low Income areas 1/ | | | | | | | | | |
| Loss | 17 | 344 | 3.4 | -0.6 | | 26 | 161 | 2.9 | -0.3 |
| Less than 15 | 23 | 333 | 4.5 | 0.4 | | 21 | 237 | 2.9 | 0.2 |
| 15 - 19 | 12 | 632 | 4.3 | 0.7 | | 14 | 162 | 3.2 | 0.5 |
| 20 - 24 | 12 | 684 | 3.7 | 0.8 | | 5 | 140 | 4.2 | 0.9 |
| 25 - 29 | 10 | 532 | 4.7 | 1.3 | | 6 | 233 | 5.1 | 1.4 |
| 30 - 34 | 6 | 643 | 5.3 | 1.7 | | 5 | 1,201 | 3.1 | 1.0 |
| 35 - 39 | 7 | 637 | 3.4 | 1.3 | | 5 | 115 | 4.6 | 1.7 |
| 40 - 49 | 8 | 444 | 4.6 | 2.1 | | 9 | 682 | 3.2 | 1.3 |
| 50 or more | 5 | 900 | 3.2 | 1.9 | | 9 | 143 | 3.5 | 2.0 |
| Medium-Low Income areas 1/ | | | | | | | | | |
| Loss | 8 | 534 | 3.1 | -0.4 | | 22 | 220 | 3.5 | -0.7 |
| Less than 15 | 17 | 539 | 4.1 | 0.3 | | 23 | 263 | 4.0 | 0.4 |
| 15 - 19 | 9 | 565 | 4.7 | 0.8 | | 13 | 339 | 3.5 | 0.6 |
| 20 - 24 | 16 | 484 | 4.8 | 1.1 | | 13 | 338 | 3.8 | 0.9 |
| 25 - 29 | 13 | 549 | 5.2 | 1.4 | | 7 | 180 | 4.1 | 1.1 |
| 30 - 34 | 10 | 441 | 5.5 | 1.8 | | 9 | 273 | 4.3 | 1.3 |
| 35 - 39 | 14 | 413 | 5.9 | 2.2 | | 2 | 128 | 4.3 | 1.6 |
| 40 - 49 | 7 | 424 | 6.0 | 2.7 | | 5 | 682 | 3.7 | 1.7 |
| 50 or more | 6 | 169 | 6.4 | 3.8 | | 6 | 186 | 4.3 | 2.5 |
| Medium-High Income areas 1/ | | | | | | | | | |
| Loss | 12 | 390 | 3.9 | -0.5 | | 28 | 215 | 4.0 | -0.9 |
| Less than 15 | 19 | 375 | 4.5 | 0.3 | | 18 | 298 | 4.1 | 0.3 |
| 15 - 19 | 8 | 408 | 4.8 | 0.8 | | 10 | 152 | 5.0 | 0.9 |
| 20 - 24 | 12 | 368 | 5.1 | 1.1 | | 14 | 204 | 4.8 | 1.1 |
| 25 - 29 | 11 | 405 | 4.9 | 1.3 | | 9 | 181 | 4.5 | 1.2 |
| 30 - 34 | 16 | 318 | 5.9 | 1.9 | | 7 | 279 | 4.3 | 1.3 |
| 35 - 39 | 11 | 342 | 6.2 | 2.3 | | 5 | 216 | 4.6 | 1.6 |
| 40 - 49 | 8 | 240 | 6.6 | 2.9 | | 7 | 410 | 4.6 | 2.1 |
| 50 or more | 3 | 261 | 6.3 | 3.3 | | 2 | 120 | 4.9 | 2.8 |
| High Income areas 1/ | | | | | | | | | |
| Loss | 9 | 540 | 4.0 | -0.4 | | 20 | 199 | 4.5 | -0.7 |
| Less than 15 | 16 | 691 | 4.4 | 0.4 | | 26 | 210 | 4.6 | 0.3 |
| 15 - 19 | 9 | 372 | 5.1 | 0.9 | | 14 | 180 | 5.4 | 0.9 |
| 20 - 24 | 14 | 439 | 5.3 | 1.2 | | 12 | 202 | 5.5 | 1.2 |
| 25 - 29 | 12 | 447 | 5.6 | 1.5 | | 10 | 215 | 5.1 | 1.3 |
| 30 - 34 | 12 | 405 | 6.0 | 2.0 | | 6 | 152 | 5.7 | 1.9 |
| 35 - 39 | 10 | 320 | 6.7 | 2.5 | | 5 | 208 | 5.3 | 1.9 |
| 40 - 49 | 13 | 345 | 6.8 | 2.9 | | 5 | 222 | 5.4 | 2.4 |
| 50 or more | 5 | 364 | 7.5 | 4.0 | | 2 | 162 | 6.5 | 3.7 |

1/ For explanation of income areas, see table 5, page 11.

Source: Data obtained from chain stores and independent retailers in New York City.

also that many housewives do not have either the interest in comparing prices nor the facilities for doing so with which they are commonly credited by growers and shippers. And even if such knowledge or conditions were available, the matter of service and convenience probably often outweighs small differences in prices.

It seems important that cooperative association managers, growers, and others place themselves in the position of retailers and understand their point of view when planning and doing work with retailers. The retailer engages in merchandising food for the purpose of making the best living he can. Consequently, he is more likely to push those products most enthusiastically on which he can get the best margin of profit and still do a substantial volume of business. The cost of operating different retail outlets apparently differs greatly and most of them probably have expenses amounting to from 20 to 50 percent of gross sales. Obviously a retailer should not be expected to be enthusiastic about selling a fruit on which he experiences losses, or makes only enough to cover operating costs. On the other hand, he might be expected to be keenly interested in a commodity on which he could develop a substantial volume of sales at a profit.

If this preliminary analysis is correct, it would seem that some cooperative officials, growers, and others may have had in mind the wrong approach to the margin problem. The job ahead of the apple industry and the fruit industry as a whole would, therefore, seem to be that of developing ways and means of helping retailers sell fruits more efficiently and of convincing them that substantial profits can be obtained from doing things that are helpful to the industry. One phase of this might be that of working for more equality in margins obtained on the various fruits. This would involve more stability in prices paid by retailers and more flexibility in retail prices.

SPoilAGE AND FRUIT SALES

It is generally recognized that the perishable nature of most fruits and vegetables makes the retailing of such produce more exacting and hazardous than the retailing of groceries or other staple and relatively non-perishable commodities. Consequently the relative extent of spoilage or waste, which a retailer normally incurs in handling a given fruit, must inevitably affect the merchandising as well as the profits on such a fruit.

As might be expected, the amount of spoilage varies with the kind of fruit, with the volume handled, with the type of retail outlet, and with other factors, as will be indicated by the following brief discussion.

Table 32.- Cantaloupes and Watermelons: RELATION OF INCOME AREA AND VARIATIONS IN GROSS RETAIL MARGIN TO QUANTITY OF CANTALOUPE AND WATERMELONS SOLD WEEKLY, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in gross margin | Cantaloupes | | | | | Watermelons | | | | |
|-----------------------------|------------------------------------|------------------------------------|---------------------------------------|------------------------------|--|------------------------------------|------------------------------------|---------------------------------------|------------------------------|--|
| | Proportion of outlets in come area | Quantity sold in weekly per outlet | Average realized retail price per lb. | Average gross margin per lb. | | Proportion of outlets in come area | Quantity sold in weekly per outlet | Average realized retail price per lb. | Average gross margin per lb. | |
| | Percent | Pounds | Cents | Cents | | Percent | Pounds | Cents | Cents | |
| Low Income areas 1/ | | | | | | | | | | |
| Loss | 22 | 257 | 2.2 | -0.6 | | -- | -- | -- | -- | |
| Less than 15 | 18 | 261 | 4.3 | 0.4 | | 7 | 4,248 | 0.9 | 0.1 | |
| 15 - 19 | 10 | 164 | 3.1 | 0.5 | | 21 | 2,276 | 1.1 | 0.2 | |
| 20 - 24 | 8 | 384 | 3.4 | 0.7 | | 41 | 554 | 1.9 | 0.5 | |
| 25 - 29 | 6 | 312 | 2.2 | 0.6 | | 17 | 310 | 1.8 | 0.4 | |
| 30 - 34 | 10 | 202 | 4.1 | 1.3 | | -- | -- | -- | -- | |
| 35 - 39 | 6 | 371 | 4.1 | 1.5 | | 10 | 4,536 | 1.0 | 0.4 | |
| 40 - 49 | 13 | 644 | 2.2 | 1.0 | | -- | -- | -- | -- | |
| 50 or more | 7 | 1,652 | 2.3 | 1.2 | | 4 | 72 | 3.6 | 1.9 | |
| Medium-Low Income areas 1/ | | | | | | | | | | |
| Loss | 12 | 201 | 1.8 | -0.2 | | 7 | 236 | 2.3 | 0.0 | |
| Less than 15 | 16 | 232 | 4.0 | 0.5 | | 6 | 456 | 1.6 | 0.2 | |
| 15 - 19 | 8 | 198 | 2.8 | 0.5 | | 13 | 302 | 1.9 | 0.3 | |
| 20 - 24 | 11 | 327 | 2.9 | 0.7 | | 21 | 850 | 1.7 | 0.4 | |
| 25 - 29 | 16 | 556 | 2.3 | 0.6 | | 20 | 196 | 2.2 | 0.6 | |
| 30 - 34 | 11 | 286 | 3.3 | 1.1 | | 12 | 1,863 | 1.5 | 0.5 | |
| 35 - 39 | 5 | 333 | 2.7 | 1.0 | | 4 | 1,236 | 1.4 | 0.5 | |
| 40 - 49 | 13 | 584 | 2.1 | 0.9 | | 13 | 287 | 2.4 | 1.0 | |
| 50 or more | 8 | 308 | 3.0 | 1.7 | | 4 | 174 | 5.5 | 3.2 | |
| Medium-High Income areas 1/ | | | | | | | | | | |
| Loss | 17 | 309 | 2.1 | -0.4 | | 4 | 367 | 2.3 | -0.7 | |
| Less than 15 | 15 | 262 | 3.3 | 0.3 | | 7 | 790 | 1.9 | 0.2 | |
| 15 - 19 | 11 | 237 | 4.3 | 0.7 | | 8 | 718 | 2.1 | 0.4 | |
| 20 - 24 | 10 | 562 | 2.4 | 0.6 | | 15 | 470 | 2.0 | 0.5 | |
| 25 - 29 | 11 | 214 | 3.8 | 1.0 | | 23 | 353 | 2.6 | 0.7 | |
| 30 - 34 | 8 | 328 | 2.6 | 0.8 | | 26 | 633 | 1.9 | 0.6 | |
| 35 - 39 | 8 | 220 | 3.5 | 1.3 | | 4 | 576 | 1.8 | 0.7 | |
| 40 - 49 | 10 | 436 | 2.8 | 1.2 | | 9 | 423 | 2.4 | 1.0 | |
| 50 or more | 10 | 392 | 3.3 | 2.0 | | 4 | 228 | 3.3 | 1.7 | |
| High Income areas 1/ | | | | | | | | | | |
| Loss | 19 | 356 | 2.1 | -0.8 | | 11 | 162 | 1.6 | -0.3 | |
| Less than 15 | 18 | 266 | 3.5 | 0.3 | | 12 | 176 | 2.3 | 0.2 | |
| 15 - 19 | 9 | 338 | 3.4 | 0.6 | | 10 | 355 | 2.2 | 0.3 | |
| 20 - 24 | 12 | 317 | 3.9 | 0.8 | | 10 | 564 | 2.4 | 0.6 | |
| 25 - 29 | 11 | 334 | 4.5 | 1.2 | | 16 | 329 | 2.4 | 0.7 | |
| 30 - 34 | 8 | 337 | 3.1 | 1.0 | | 15 | 685 | 1.6 | 0.5 | |
| 35 - 39 | 6 | 210 | 5.7 | 2.1 | | 7 | 232 | 2.7 | 1.0 | |
| 40 - 49 | 12 | 396 | 3.7 | 1.7 | | 12 | 860 | 1.7 | 0.7 | |
| 50 or more | 5 | 546 | 4.5 | 2.8 | | 7 | 259 | 3.2 | 1.8 | |

1/ For explanation of income areas, see table 5, page 11.

Source: Data obtained from chain stores and independent retailers in New York City.

Apples

The average spoilage on eastern apples, reported by these retailers, was 3.3 pounds per hundredweight. Pushcart operators, however, reported spoilage of only 1.7 pounds per hundred, while fruit and vegetable stores had spoilage of almost 5 pounds in each hundred. In the case of western apples, spoilage averaged 5.3 pounds per hundred, but chain grocers reported almost 12 pounds, while meat markets reported only 2 pounds per hundredweight (table 33).

Oranges

The largest average spoilage of California oranges was reported by hucksters (4.1 pounds per hundred), and the lowest by pushcart operators (2.5 pounds per hundred). Spoilage reported by the remaining four outlets was remarkably uniform (i.e., from 3.1 to 3.7 pounds per hundred).

On Florida oranges, however, no outlet reported spoilage of less than 10 pounds per hundred, and three outlets reported spoilage of more than 12 pounds per hundred. The spoilage on Florida oranges was probably abnormally high in August 1939, due to the unusually long season for Florida oranges which usually are not on the market in large quantities during August.

Other Fruits

Spoilage of grapefruit ranged from about 5 pounds by pushcart operators to 12 pounds by hucksters, and averaged 7 pounds per hundredweight for all outlets.

On bananas, spoilage averaged 8 pounds per hundred, and ranged from 6-1/2 pounds by pushcart operators and meat markets to over 11 pounds per hundred by hucksters.

Spoilage on peaches averaged 7.8 pounds per hundred, and ranged from about 5.4 pounds by pushcart operators to over 9 pounds by independent grocery stores.

Spoilage on cantaloupes was nearly as serious as on Florida oranges, averaging 11 pounds per hundred. Pushcart operators reported the lowest loss (7.7 pounds per hundred); but none of the other types of outlets had spoilage of less than 10-1/2 pounds per hundred, and chain groceries reported losses of 12.6 pounds.

Considering bulk and perishability, spoilage on watermelons was relatively low, averaging 3.3 pounds per hundred. The range was from no loss at all on the very small quantities of watermelons handled by pushcart operators to almost 4 pounds per hundred in fruit and vegetable stores.

Table 33.- RELATIVE LOSS FROM SPOILAGE PER HUNDRED POUNDS PURCHASED ON SELECTED FRUITS, AS REPORTED BY VARIOUS TYPES OF RETAIL OUTLETS, NEW YORK CITY, AUGUST 1939

| Fruit | Spoilage per 100 pounds purchased by type of retail outlet | | | | | | | Average all retail outlets Pounds |
|-----------------------------------|--|------------------------|------------------|------------------------|------------------------------|------------------------------------|-------------|--------------------------------------|
| | Fruit and vegetable stores Pounds | Grocery stores | | Meat markets Pounds | Pushcart operators Pounds | Wagon or motor hucksters Pounds | | |
| | | Independents Pounds | Chains Pounds | | | | | |
| | | | | | | | | |
| Apples: Eastern Western | 4.8 5.3 | 4.4 5.0 | 4.6 11.9 | 3.9 2.0 | 1.7 4.0 | 4.6 0.0 | 3.8 5.3 | |
| Oranges: California Florida | 3.1 13.0 | 3.4 11.8 | 3.3 12.3 | 3.7 12.5 | 2.5 10.2 | 4.1 1/ | 3.2 11.7 | |
| Grapefruit | 8.0 | 6.9 | 7.1 | 6.1 | 5.1 | 12.1 | 7.0 | |
| Bananas | 8.0 | 7.9 | 9.1 | 6.5 | 6.5 | 11.4 | 8.0 | |
| Peaches | 8.6 | 9.1 | 8.9 | 7.7 | 5.4 | 8.3 | 7.8 | |
| Pears: Eastern Western | 2.8 3.9 | 3.1 5.6 | 4.7 6.0 | 2.0 3.9 | 0.8 3.4 | 1.3 6.1 | 2.0 4.2 | |
| Grapes: Eastern Western | --- 6.6 | --- 7.5 | 0.0 2.8 | --- 6.0 | --- 4.0 | 4.2 8.9 | 3.4 6.2 | |
| Cantaloupes | 11.7 | 10.7 | 12.6 | 10.6 | 7.7 | 11.7 | 11.0 | |
| Honeydew Melons | 6.5 | 5.6 | 6.4 | 5.6 | 1.2 | 1.7 | 5.2 | |
| Honeyball Melons | 8.9 | 8.2 | 8.5 | 5.8 | 8.6 | 8.5 | 8.5 | |
| Watermelons | 3.9 | 3.5 | 3.7 | 2.2 | 0.0 | 2.7 | 3.3 | |
| Other Melons | 8.4 | 3.3 | 15.3 | 7.5 | --- | --- | 10.5 | |

1/ Too few handled to be significant.

Source: Data obtained from chain stores and independent retailers in New York City.

It will be noted (table 33) that spoilage losses, reported by pushcart operators were, in most cases, less than those reported by other outlets. Pushcart operators are known in the produce trade as excellent outlets for fully ripe or slightly bruised fruit, which must be moved into consumption rapidly. They cater to large numbers of low income consumers who are willing to buy wholesome, ripe, or even slightly bruised fruit, providing the prices are low enough.

SPOILAGE RELATED TO PHYSICAL VOLUME HANDLED

One of the factors which affects spoilage is the physical volume of a given fruit handled per outlet. In the case of eastern apples, loss from spoilage averaged 6.2 pounds per hundred where less than 50 pounds were handled weekly, in comparison with 3 pounds per hundred where 400 pounds or more per week were handled, a decrease in spoilage of 52 percent. The experience with western apples was quite similar (table 34).

Spoilage directly affects the gross amount realized by the retailer from his purchase and this directly affects his margin. However, these tabulations do not indicate that the outlets having the lower spoilage rates consistently had the higher percentage margins. Apparently other factors were of greater importance than spoilage. However, spoilage rates may have affected the enthusiasm of retailers for selling apples.

Citrus Fruit

Spoilage on California oranges decreased from 4 pounds per hundred in outlets handling less than 100 pounds weekly, to 3.1 pounds per hundred when 1,000 or more pounds were handled weekly (a decrease of 22 percent in spoilage) (table 35). Similarly, spoilage on Florida oranges decreased from 15.3 pounds to 10.4 pounds per hundred, or 32 percent; and grapefruit from 9.3 pounds to 5.5 pounds per hundred, or 41 percent.

Peaches

Spoilage seemed to remain about the same (about 10 pounds per hundred), when less than 200 pounds were handled per week. It dropped to 6.2 pounds per hundred, however, when 1,000 or more pounds were handled weekly (or about 38 percent) (table 36).

Other Fruits

Banana spoilage decreased 47 percent as volume per outlet rose from less than 50 to 1,000 pounds or more per week (table 36). Spoilage losses on cantaloupes, honeydew melons, and honeyball melons also showed important decreases as weekly volume per outlet

Table 34.- RELATION OF PHYSICAL VOLUME OF APPLES SOLD PER RETAIL OUTLET, TO SPOILAGE, PRICES AND MARGINS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in quantity sold weekly per outlet | Spoilage per 100 pounds purchased | Average realized retail selling price | Gross retail margin | | Percent of outlets handling 1/ Percent |
|--|--------------------------------------|---|---------------------|---|---|
| | | | Per pound | Percent of realized retail price | |
| Pounds | Pounds | Cents | Cents | Percent | Percent |
| Eastern Apples: | | | | | |
| Less than 50 | 100 | 4.3 | 1.9 | 44 | 25 |
| 50 - 99 | 73 | 4.2 | 1.8 | 43 | 21 |
| 100 - 149 | 71 | 4.1 | 1.8 | 44 | 16 |
| 150 - 199 | 69 | 4.3 | 2.1 | 49 | 8 |
| 200 - 299 | 65 | 3.8 | 1.8 | 47 | 12 |
| 300 - 399 | 76 | 3.8 | 1.7 | 45 | 5 |
| 400 or more | 48 | 3.1 | 1.6 | 52 | 13 |
| Western Apples: | | | | | |
| Less than 50 | 100 | 6.9 | 2.5 | 36 | 71 |
| 50 - 99 | 99 | 6.6 | 2.4 | 36 | 16 |
| 100 - 149 | 58 | 7.2 | 3.3 | 46 | 7 |
| 150 - 199 | 122 | 8.0 | 3.3 | 41 | 3 |
| 200 - 299 | 43 | 6.6 | 3.0 | 45 | 1 |
| 300 or more | 34 | 4.7 | 1.1 | 23 | 2 |

1/ 930 outlets reported handling eastern apples and 224 handling western apples.

Source: Data obtained from chain stores and independent retailers in New York City.

rose (table 37); as did both eastern and western pears (table 38); and western grapes and watermelons (table 39).

The foregoing data seems to indicate the possibility that when a retailer can be induced to stock a given fruit or vegetable in fairly large quantities, his own self-interest will force him to give such produce much more consideration in his merchandising practices than when only small or occasional quantities are purchased. It is also likely that outlets which sell a large volume have somewhat faster turnover of fresh fruit, and a relatively smaller carry over of unsold fruit from one day to another than do small volume outlets, and are thus enabled to have a smaller percentage spoilage.

DISPLAY AND SALES

The data available from this survey does not answer the question to what extent it pays to devote display space to a given fruit. The question may well be raised: "Does a large display of apples sell a large volume of apples, or does a retailer have a large display merely because he has learned he can sell a large volume of apples and must put them somewhere?" It is probable that only through experimentation, on a large scale, with carefully kept sales records and displays of varying quantities, will the answer to such a question be obtained. The data gathered in this survey show, in general, that those retail outlets which had the largest displays of apples, sold the largest volumes of apples. In the 333 fruit and vegetable stores which handled apples, sales per week were 122 pounds per outlet where displays were 3 square feet or less and 518 pounds per outlet where displays were 20 square feet or more (table 40). Results in meat markets were quite similar, and were even more striking in both independent and chain grocery stores. Results were less consistent among pushcart operators and hucksters, probably because of the physical limitations on display imposed by the dimensions of the pushcart, motortruck or wagon used.

The most outstanding fact developed by analysis of the data concerning apple display was the comparatively large number of outlets which devoted 3 square feet or less to the display of apples. In the case of both chain and independent grocery stores, 59 percent were in this group, as were one-third of the fruit and vegetable stands, pushcarts and meat markets, and one-fifth of the wagon hucksters (table 40). On the other hand, 25 percent of the meat markets, 13 percent of the fruit and vegetable stands, 12 percent of the hucksters, and 7 percent of the pushcart operators had displays of apples covering 15 or more square feet. Very few of the grocery stores (6 percent of the independents, and 5 percent of the chains) had such large displays.

Table 35.- RELATION OF PHYSICAL VOLUME OF CITRUS FRUITS SOLD WEEKLY PER RETAIL OUTLET, TO SPOILAGE, PRICES AND MARGINS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in quantity sold weekly per outlet | Spoilage per 100 pounds purchased | | Average realized retail selling price | Gross retail margin | | Percent of outlets handling 1/ |
|--|-----------------------------------|-------|---------------------------------------|---------------------|---------|--------------------------------|
| | Pounds | Index | Cents | Per pound | Percent | Percent |
| California Oranges: | | | | | | |
| Less than 100 | | 100 | 8.0 | 1.8 | 22 | 22 |
| 100 - 199 | 4.0 | 92 | 7.0 | 1.6 | 23 | 21 |
| 200 - 299 | 3.7 | 80 | 7.0 | 1.5 | 21 | 23 |
| 300 - 399 | 3.2 | 88 | 7.1 | 1.6 | 23 | 7 |
| 400 - 499 | 3.5 | 72 | 7.1 | 1.5 | 21 | 8 |
| 500 - 999 | 2.9 | 80 | 7.2 | 1.7 | 24 | 11 |
| 1000 or more | 3.2 | 78 | 6.3 | 1.1 | 17 | 8 |
| Florida Oranges: | | | | | | |
| Less than 100 | | 100 | 4.4 | 0.8 | 18 | 40 |
| 100 - 199 | 15.3 | 88 | 4.3 | 0.7 | 16 | 16 |
| 200 - 299 | 13.5 | 78 | 4.5 | 1.0 | 22 | 15 |
| 300 - 399 | 11.9 | 76 | 4.1 | 0.8 | 20 | 7 |
| 400 - 499 | 11.6 | 69 | 4.0 | 0.4 | 10 | 6 |
| 500 - 999 | 10.5 | 80 | 3.8 | 0.7 | 18 | 9 |
| 1000 or more | 12.3 | 68 | 3.1 | 0.5 | 16 | 7 |
| Grapefruit: | | | | | | |
| Less than 50 | | 100 | 4.9 | 1.2 | 24 | 25 |
| 50 - 99 | 9.3 | 88 | 5.1 | 1.4 | 27 | 43 |
| 100 - 199 | 8.2 | 76 | 4.9 | 1.4 | 29 | 16 |
| 200 - 399 | 7.1 | 71 | 4.6 | 1.4 | 30 | 10 |
| 400 or more | 6.6 | 59 | 3.9 | 1.2 | 31 | 6 |

1/ California Oranges were handled by 1,196 retail outlets; Florida Oranges by 308 retail outlets; and Grapefruit by 494 retail outlets.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 36.- RELATION OF PHYSICAL VOLUME OF PEACHES AND BANANAS SOLD WEEKLY PER RETAIL OUTLET, TO SPOILAGE, PRICES AND MARGINS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in quantity sold weekly per outlet | Spoilage per 100 pounds purchased | | Average realized retail selling price | Gross retail margin | | Percent of outlets handling 1/ Percent |
|--|--------------------------------------|--------------|---|----------------------|----------------|---|
| | <u>Pounds</u> | <u>Index</u> | | <u>Per pound</u> | <u>Percent</u> | |
| Peaches: | | | | | | |
| Less than 50 | 10.1 | 100 | 5.6 | 1.5 | 27 | 11 |
| 50 - 99 | 10.1 | 100 | 5.5 | 1.3 | 24 | 12 |
| 100 - 149 | 9.0 | 89 | 5.7 | 1.5 | 26 | 12 |
| 150 - 199 | 10.3 | 102 | 5.4 | 1.2 | 22 | 8 |
| 200 - 249 | 9.3 | 92 | 5.6 | 1.3 | 23 | 3 |
| 250 - 299 | 8.4 | 83 | 5.7 | 1.4 | 25 | 10 |
| 300 - 399 | 8.5 | 84 | 5.5 | 1.4 | 25 | 8 |
| 400 - 699 | 9.0 | 89 | 5.4 | 1.4 | 26 | 14 |
| 700 - 999 | 8.3 | 82 | 4.9 | 1.2 | 24 | 8 |
| 1000 or more | 6.2 | 61 | 4.1 | 0.9 | 22 | 9 |
| Bananas: | | | | | | |
| Less than 50 | 12.5 | 100 | 5.5 | 1.3 | 24 | 5 |
| 50 - 99 | 10.5 | 84 | 4.9 | 0.8 | 16 | 22 |
| 100 - 149 | 9.7 | 78 | 4.5 | 0.5 | 11 | 21 |
| 150 - 199 | 8.9 | 71 | 4.6 | 0.7 | 15 | 18 |
| 200 - 299 | 7.8 | 62 | 4.6 | 0.6 | 13 | 12 |
| 300 - 399 | 6.8 | 54 | 4.4 | 0.6 | 14 | 10 |
| 400 - 699 | 8.2 | 66 | 4.2 | 0.6 | 14 | 7 |
| 700 - 999 | 7.8 | 62 | 4.1 | 0.4 | 10 | 2 |
| 1000 or more | 6.6 | 53 | 3.5 | 0.9 | 26 | 3 |

1/ Peaches were handled by 1,268 retail outlets, and bananas by 904 retail outlets.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 37.- RELATION OF PHYSICAL VOLUME OF CANTALOUPEs, HONEYDEW AND HONEYBALL MELONS SOLD WEEKLY PER RETAIL OUTLET, TO SPOILAGE, PRICES AND MARGINS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in quantity sold weekly per outlet | Spoilage per 100 pounds purchased | | Average realized retail selling price | Gross retail margin | | Percent of outlets handling 1/ handling 1/ |
|--|--------------------------------------|-------|---|---------------------|---------|---|
| | Pounds | Index | | Per pound | Percent | |
| Cantaloupes: | | | | | | |
| Less than 100 | 13.1 | 100 | 4.0 | 0.9 | 22 | 28 |
| 100 - 199 | 12.3 | 94 | 3.8 | 0.8 | 21 | 25 |
| 200 - 399 | 11.2 | 85 | 3.9 | 1.0 | 26 | 24 |
| 400 - 599 | 11.2 | 85 | 3.3 | 0.7 | 21 | 10 |
| 600 - 799 | 11.4 | 87 | 3.4 | 0.8 | 24 | 4 |
| 800 - 999 | 9.8 | 75 | 2.9 | 0.9 | 31 | 2 |
| 1000 or more | 10.4 | 79 | 2.2 | 0.7 | 32 | 7 |
| Honeydew Melons: | | | | | | |
| Less than 50 | 7.0 | 100 | 6.4 | 1.2 | 19 | 26 |
| 50 - 99 | 6.7 | 96 | 6.4 | 1.1 | 17 | 19 |
| 100 - 199 | 6.1 | 87 | 6.6 | 1.4 | 21 | 22 |
| 200 - 299 | 5.7 | 81 | 6.5 | 1.4 | 22 | 15 |
| 300 - 499 | 6.5 | 93 | 6.2 | 1.2 | 19 | 11 |
| 500 - 999 | 3.0 | 43 | 6.0 | 1.2 | 20 | 5 |
| 1000 or more | 1.7 | 24 | 5.7 | 1.1 | 19 | 2 |
| Honeyball Melons: | | | | | | |
| Less than 50 | 8.3 | 100 | 6.2 | 1.1 | 18 | 10 |
| 50 - 99 | 12.4 | 141 | 5.8 | 1.0 | 17 | 44 |
| 100 - 199 | 9.5 | 108 | 6.0 | 1.0 | 17 | 22 |
| 200 - 299 | 9.6 | 109 | 5.6 | 1.1 | 20 | 13 |
| 300 - 499 | 5.7 | 65 | 5.7 | 1.0 | 18 | 7 |
| 500 - 999 | 9.4 | 107 | 4.9 | 0.7 | 14 | 3 |
| 1000 or more | 3.4 | 39 | 8.1 | 4.0 | 49 | 1 |

1/ Cantaloupes were handled by 1,075 retail outlets; honeydew melons by 800 retail outlets; and honeyball melons by 197 retail outlets.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 38.- RELATION OF PHYSICAL VOLUME OF PEARS SOLD WEEKLY PER RETAIL OUTLET, TO SPOILAGE, PRICES AND MARGINS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in quantity sold weekly per outlet | Spoilage or 100 pounds purchased | | Average realized retail selling price | Gross retail margin | | Percent of outlets handling 1/ handling 1/ Percent |
|--|-------------------------------------|-------|---|---------------------|---------|--|
| | Pounds | Index | | Per pound | Percent | |
| Eastern Pears: | | | | | | |
| Less than 50 | | | | | | |
| 50 - 99 | 8.2 | 100 | 4.8 | 1.7 | 35 | 22 |
| 100 - 199 | 3.8 | 46 | 4.6 | 1.8 | 39 | 41 |
| 200 - 299 | 2.1 | 26 | 4.3 | 1.9 | 44 | 19 |
| 300 - 499 | 1.7 | 21 | 4.2 | 1.6 | 38 | 8 |
| 500 - 999 | 0.4 | 5 | 3.7 | 1.0 | 27 | 5 |
| 1000 or more | 2.0 | 24 | 3.6 | 0.6 | 17 | 4 |
| | --- | --- | 2.8 | 0.4 | 14 | 1 |
| Western Pears: | | | | | | |
| Less than 50 | | | | | | |
| 50 - 99 | 6.4 | 100 | 8.0 | 1.7 | 21 | 27 |
| 100 - 149 | 5.8 | 91 | 8.1 | 1.7 | 21 | 22 |
| 150 - 199 | 4.8 | 75 | 8.1 | 1.7 | 21 | 12 |
| 200 - 299 | 4.2 | 66 | 7.9 | 1.5 | 19 | 9 |
| 300 - 499 | 4.0 | 62 | 7.9 | 1.6 | 20 | 12 |
| 500 - 999 | 4.4 | 69 | 7.5 | 1.5 | 20 | 9 |
| 1000 or more | 3.2 | 50 | 7.3 | 1.3 | 18 | 7 |
| | 3.6 | 56 | 6.8 | 1.3 | 19 | 2 |
| 1/ Eastern Pears were handled by 196 retail outlets and Western pears by 947 retail outlets. | | | | | | |

Source: Data obtained from chain stores and independent retailers in New York City.

Table 39.-- RELATION OF PHYSICAL VOLUME OF WESTERN GRAPES AND WATERMELONS SOLD WEEKLY PER RETAIL OUTLET, TO SPOILAGE, PRICES AND MARGINS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Range in quantity sold weekly per outlet | Spoilage per 100 pounds purchased | | Average realized retail selling price | Gross retail margin | | Percent of outlets handling 1/ |
|---|-----------------------------------|-------|---------------------------------------|---------------------|----------------------------------|--------------------------------|
| | | | | Per pound | Percent of realized retail price | |
| Pounds | Pounds | Index | Cents | Cents | Percent | Percent |
| Western Grapes: | | | | | | |
| Less than 50 | 9.5 | 100 | 8.4 | 1.8 | 21 | 23 |
| 50 - 99 | 7.8 | 82 | 8.4 | 2.1 | 25 | 31 |
| 100 - 199 | 7.0 | 74 | 8.0 | 1.8 | 22 | 23 |
| 200 - 399 | 7.0 | 74 | 7.4 | 1.5 | 20 | 13 |
| 400 - 599 | 4.5 | 47 | 6.7 | 1.4 | 21 | 5 |
| 600 - 999 | 4.4 | 46 | 6.8 | 1.2 | 18 | 3 |
| 1000 or more | 5.2 | 55 | 6.4 | 1.4 | 22 | 2 |
| Watermelons: | | | | | | |
| Less than 100 | 3.5 | 100 | 3.0 | 0.9 | 30 | 17 |
| 100 - 199 | 4.3 | 123 | 2.6 | 0.8 | 31 | 24 |
| 200 - 299 | 3.5 | 100 | 2.5 | 0.7 | 28 | 21 |
| 300 - 499 | 3.1 | 89 | 2.4 | 0.6 | 29 | 15 |
| 500 - 999 | 3.4 | 97 | 2.2 | 0.5 | 27 | 15 |
| 1000 or more | 3.1 | 89 | 1.3 | | 23 | 8 |
| 1/ Western grapes were handled by 910 retail outlets, and watermelons were handled by 474 retail outlets. | | | | | | |

Source: Data obtained from chain stores and independent retailers in New York City.

There were equally wide variations in the practices followed in the display of oranges, but in general, orange displays ran larger than those of apples. Except for independent grocery stores, the largest proportion of outlets used from 4 to 6 square feet to display oranges (table 41). Meat markets (29 percent) and fruit and vegetable stands (27 percent) vied for first place in use of relatively large orange displays (i.e., 20 square feet or more). Pushcarts were third in importance, with 14 percent, but only 8 percent of the chain groceries, and 6 percent each of the independent groceries and hucksters used that much space for orange display.

As a further check on these outlets, enumerators were required to give each outlet a personal rating of excellent, good, or poor, with respect to the display of fruits and vegetables. While such ratings represent strictly the personal appraisal of each enumerator, the results were rather striking. Sales of selected fruits in fruit and vegetable stores with a display rated "excellent" totaled 3,618 pounds weekly per outlet, compared with 934 pounds where the rating was "poor" (table 42). In chain grocery stores, comparable figures were 3,985 pounds and 621 pounds; and in independent grocery stores, 2,856 and 278 pounds. In all types of outlets, sales in outlets where the display was rated "excellent" were much larger than in outlets rated "poor". A larger proportion of the meat markets were rated "excellent" with respect to display than of any other type of outlet, and chain grocers and independent fruit and vegetable stands vied closely for second place.

The meager display data gathered in this survey seem to indicate that volume of sales per outlet is roughly but not closely associated with area of display. A detailed study of space costs and relative net returns to retailers would probably be necessary before optimum display area for a given fruit or vegetable could be determined. The optimum area should be expected to differ greatly among outlets. In any store, the total amount of space available for fruit must necessarily be an important factor.

CREDIT AND DELIVERY

The degree to which the retail business is done on a credit basis is not generally known. It is commonly assumed by most growers that chain grocery stores operate on a cash basis. This is no doubt true of some chains, but is not true of others. One prominent chain system in New York City caters largely to consumers who require both credit and delivery. The degree of credit extension varied widely. For example, 83 percent of the independent grocery stores reported extension of credit, about 55 to 57 percent of the meat markets and fruit and vegetable stands; 27 percent of the chain grocery stores, but only 17 percent or less of the hucksters and pushcart operators (table 43).

Table 40.-- RELATION OF DISPLAY SPACE DEVOTED TO APPLES TO QUANTITY OF APPLES HANDLED BY EACH TYPE OF RETAIL OUTLET 1/ NEW YORK CITY, AUGUST 1939

| Display Space used for apples | Quantity of apples handled weekly by each type of retail outlet | | | | |
|-------------------------------------|---|---------------------|---------------|-----------------------|------------------------------|
| | 333 fruit and vegetable stores | Grocery Stores | | 53 meat markets | 123 pushcart operators |
| | | 233 independents | 186 chains | | |
| Square Feet | Pounds | Pounds | Pounds | Pounds | Pounds |
| 3 or less | 122 | 90 | 96 | 108 | 197 |
| 4 - 6 | 186 | 140 | 120 | 128 | 413 |
| 7 - 9 | 190 | 231 | 175 | 285 | 680 |
| 10 - 14 | 270 | 169 | 368 | 380 | 1,200 |
| 15 - 19 | 259 | 404 | 548 | 352 | 1,176 |
| 20 or more | 518 | 667 | 636 | 583 | 893 |
| | | | | | 336 |
| | | | | | 393 |
| | | | | | 426 |
| | | | | | 1,017 |
| | | | | | 528 |
| | | | | | --- |

| Proportion of stores handling apples in each classification | | | | | |
|---|--------------------------------|---------|----------------|---------|-----------------|
| | 333 fruit and vegetable stores | | Grocery Stores | | 53 meat markets |
| | Percent | Percent | Percent | Percent | Percent |
| 3 or less | 33 | 59 | 59 | 34 | 33 |
| 4 - 6 | 25 | 23 | 26 | 19 | 33 |
| 7 - 9 | 17 | 6 | 6 | 11 | 24 |
| 10 - 14 | 12 | 6 | 4 | 11 | 3 |
| 15 - 19 | 7 | 2 | 3 | 14 | 3 |
| 20 or more | 6 | 4 | 2 | 11 | 4 |
| | | | | | 20 |
| | | | | | 22 |
| | | | | | 20 |
| | | | | | 26 |
| | | | | | 12 |
| | | | | | --- |

1/ The above data include only those stores which actually handled apples. Stores handling apples were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 80%; independent grocery stores, 57%; chain grocery stores, 70%; meat markets, 34%; pushcart operators, 39%; and wagon or motor hucksters, 55%.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 41.- RELATION OF DISPLAY SPACE DEVOTED TO ORANGES TO QUANTITY OF ORANGES HANDLED BY EACH TYPE OF RETAIL OUTLET ^{1/}, NEW YORK CITY, AUGUST 1939

| Display Space used for oranges | Square Feet | Quantity of oranges handled weekly by each type of retail outlet | | | | | |
|--------------------------------------|-------------|--|----------------|--------|-----------------------|------------------------------|-----------------------------------|
| | | 404 fruit and vegetable stores | Grocery stores | | 59 meat markets | 127 pushcart operators | 35 wagon or motor hucksters |
| | | | independents | chains | | | |
| | | | | | | | |
| 3 or less | | Pounds | Pounds | Pounds | Pounds | Pounds | |
| 4 - 6 | | 113 | 115 | 310 | 99 | 109 | 300 |
| 7 - 9 | | 282 | 219 | 346 | 220 | 486 | 368 |
| 10 - 14 | | 272 | 206 | 438 | 277 | 522 | 483 |
| 15 - 19 | | 416 | 430 | 701 | 555 | 1,229 | 385 |
| 20 - 29 | | 491 | 409 | 609 | 477 | 1,192 | 503 |
| 30 - 39 | | 491 | 678 | 1,667 | 1,085 | 1,893 | 366 |
| 40 or more | | 771 | 675 | 1,635 | 813 | 4,187 | --- |
| | | 979 | 985 | 1,784 | 913 | --- | --- |

| Proportion of retail outlets handling oranges in each classification | | | | | |
|--|---------|---------|---------|---------|---------|
| Percent | Percent | Percent | Percent | Percent | Percent |
| 9 | 34 | 21 | 12 | 15 | 20 |
| 19 | 29 | 38 | 17 | 23 | 32 |
| 17 | 17 | 17 | 15 | 21 | 20 |
| 11 | 7 | 9 | 12 | 8 | 11 |
| 17 | 7 | 7 | 15 | 13 | 11 |
| 13 | 2 | 4 | 14 | 9 | 6 |
| 9 | 2 | 2 | 5 | 5 | --- |
| 5 | 2 | 2 | 10 | --- | --- |

^{1/} The above data include only those stores which actually handled oranges. Stores handling oranges were in the following proportions to total stores of each type included in this survey: Fruit and vegetable stores, 97%; independent grocery stores, 93%; chain grocery stores, 97%; meat markets, 94%; pushcart operators, 40%; wagon or motor hucksters, 47%, (48% of the wagon or motor hucksters handled oranges, but 1% did not report display space).

Source: Data obtained from chain stores and independent retailers in New York City.

Table 42.- Display: RELATION OF ENUMERATOR'S APPRAISAL OF DISPLAY OF FRUITS AND VEGETABLES IN RETAIL OUTLETS, BY TYPE OF STORE, TO QUANTITY AND DOLLAR SALES OF FRUITS AND VEGETABLES, AND QUANTITY OF SELECTED FRUITS SOLD WEEKLY, NEW YORK CITY, AUGUST 1939

| Type of outlet | Enumerator's rating of display <u>1/</u> | Outlets in group | | Average weekly sales | |
|----------------------------|--|------------------|------------------|-------------------------------------|----------------------------------|
| | | Total | Percent of total | All fruits and vegetables (Dollars) | Selected fruits <u>2/</u> Pounds |
| | | | | | |
| Fruit and vegetable stores | Excellent | 119 | 28 | 365 | 3,618 |
| | Good | 253 | 61 | 180 | 1,549 |
| | Poor | 46 | 11 | 101 | 934 |
| Grocery stores: | | | | | |
| Independent | Excellent | 42 | 10 | 285 | 2,856 |
| | Good | 271 | 67 | 95 | 930 |
| | Poor | 93 | 23 | 31 | 278 |
| Chain | Excellent | 77 | 29 | 258 | 3,985 |
| | Good | 180 | 69 | 106 | 1,342 |
| | Poor | 6 | 2 | 40 | 621 |
| Meat markets | Excellent | 24 | 38 | 411 | 4,625 |
| | Good | 37 | 59 | 176 | 1,535 |
| | Poor | 2 | 3 | 35 | 112 |
| Pushcart operators | Excellent | 25 | 8 | 145 | 2,432 |
| | Good | 262 | 83 | 103 | 1,835 |
| | Poor | 28 | 9 | 81 | 1,044 |
| Wagon or motor hucksters | Excellent | 14 | 19 | 136 | 2,953 |
| | Good | 58 | 77 | 142 | 3,681 |
| | Poor | 3 | 4 | 58 | 460 |

1/ Enumerators were instructed to rate each outlet excellent, good or poor according to personal appraisal of display.

2/ Includes Apples (Eastern and Western), Oranges (California and Florida); Grapefruit, Bananas, Peaches, Pears (Eastern and Western), Grapes (Eastern and Western), Cantaloupes, Honeydew Melons, Honeyball Melons, Other Melons, and Watermelons.

Source: Data obtained from chain stores and independent retailers in New York City.

The popular idea that many stores are doing a large volume of business because they are willing to extend credit does not seem to have been corroborated by the experiences of these retail outlets during August 1939. When all stores were divided roughly into two groups, one giving credit and the other not, total average weekly sales were appreciably larger in grocery stores and meat markets where no credit was given than in those where some credit was given. For example, total sales were \$144 higher per week in no-credit independent grocery stores than in credit-giving stores; \$238 higher in no-credit chain grocery stores than in those giving credit; and \$113 higher per week in no-credit meat markets than in those giving credit (table 44). Sales in fruit and vegetable stores giving credit averaged only \$11 more per week than in stores not offering credit, and differences in sales by pushcart operators and wagon or motor hucksters were also relatively small.

The degree to which delivery service was offered was highly variable. For example, only 3 percent of the pushcart operators performed any delivery service, in contrast with 99 percent of the wagon or motor hucksters, 87 percent of the chain groceries, 65 percent of the meat markets, 62 percent of the independent grocery stores, and 54 percent of the fruit and vegetable stores (table 43).

Chain stores have usually been regarded as cash-and-carry stores, and total sales in non-delivery chain stores averaged about three times larger than in chain stores giving delivery service, even though 87 percent of these stores did offer delivery service. It is inconvenient and hazardous for most pushcart operators to leave their pushcarts unattended and perform delivery service, and little service of this type was offered by pushcart operators. For other types of independent retail outlets, however, delivery seems to have been a customary and possibly a profitable service. Sales in fruit and vegetable stands which offered delivery service were \$130 more per week than in those which did not offer delivery service; and the comparable figure for independent groceries was \$356 more per week and meat markets \$212 more for those outlets which offered delivery service as contrasted to those which did not offer delivery service, (table 45). Only one huckster did not offer delivery service.

Out of the 1,543 retail outlets, 484 reported both credit and delivery service, and 463 operated on a cash-and-carry basis. All types of independent retail outlets, except wagon or motor hucksters reported substantially larger sales on the average by credit-delivery outlets than by cash-and-carry outlets. In the case of chain grocery stores, however, sales of all commodities in cash-and-carry stores were three times larger, and of fruits and vegetables 74 percent larger, than in credit-delivery outlets (table 46).

Table 43.- PROPORTION OF EACH TYPE OF OUTLET REPORTING EXTENSION OF CREDIT AND DELIVERY SERVICE, AS REPORTED BY 1,543 RETAILERS, NEW YORK CITY, AUGUST 1939

| Type of retail outlet | Number of stores | Stores reporting extension of credit | | Stores reporting delivery service | |
|--------------------------|------------------|--------------------------------------|------------------|-----------------------------------|------------------|
| | | Number | Percent of total | Number | Percent of total |
| Fruit & vegetable stores | 418 | 230 | 55 | 225 | 54 |
| Grocery stores: | | | | | |
| Independent | 406 | 336 | 83 | 252 | 62 |
| Chain | 264 | 71 | 27 | 229 | 87 |
| Meat markets | 63 | 36 | 57 | 41 | 65 |
| Pushcart operators | 317 | 37 | 12 | 8 | 3 |
| Wagon or motor hucksters | 75 | 13 | 17 | 74 | 99 |

Source: Data obtained from chain stores and independent retailers in New York City.

Table 44.- RELATION OF CREDIT TO AVERAGE DOLLAR SALES OF ALL COM-MODITIES AND OF FRUITS AND VEGETABLES, NEW YORK CITY RETAILERS, AUGUST 1939

| Type of retail outlet | Average weekly dollar sales per store | | | |
|--------------------------|---------------------------------------|-----------------------|-------------------|-----------------------|
| | Outlets extending credit | | No credit outlets | |
| | All com-modities | Fruits and vegetables | All com-modities | Fruits and vegetables |
| | Dollars | Dollars | Dollars | Dollars |
| Fruit & vegetable stores | 248 | 224 | 237 | 227 |
| Grocery stores: | | | | |
| Independent | 448 | 93 | 592 | 140 |
| Chain | 891 | 157 | 1,179 | 143 |
| Meat markets | 650 | 214 | 763 | 319 |
| Pushcart operators | 116 | 116 | 102 | 102 |
| Wagon or motor hucksters | 142 | 142 | 137 | 137 |

Source: Data obtained from chain stores and independent retailers in New York City.

Table 45.- RELATION OF DELIVERY TO AVERAGE DOLLAR SALES OF ALL COM-
MODITIES AND OF FRUITS AND VEGETABLES, NEW YORK CITY RETAILERS,
AUGUST 1939

| Type of retail outlet | Average weekly dollar sales per store | | | |
|-----------------------------|---------------------------------------|--------------------------|------------------------|--------------------------|
| | Outlets giving delivery | | No delivery outlets | |
| | All com- modities | Fruits and vegetables | All com- modities | Fruits and vegetables |
| | <u>Dollars</u> | <u>Dollars</u> | <u>Dollars</u> | <u>Dollars</u> |
| Fruit & vegetable stores | 303 | 276 | 173 | 165 |
| Grocery stores: | | | | |
| Independent | 606 | 137 | 250 | 39 |
| Chain | 872 | 129 | 2,641 | 290 |
| Meat markets | 783 | 295 | 571 | 194 |
| Pushcart operators | 173 | 173 | 102 | 102 |
| Wagon or motor hucksters | 139 | 139 | 60 | 60 |

Source: Data obtained from chain stores and independent retail-
ers in New York City.

Table 46.- RELATION OF CREDIT AND DELIVERY SERVICES TO GROSS DOLLAR SALES PER OUTLET OF ALL COMMODITIES AND OF FRUITS AND VEGETABLES, AS REPORTED BY VARIOUS TYPES OF RETAILERS, NEW YORK CITY, AUGUST 1939

| Type of retail outlet | Weekly gross dollar sales with | | Percentage sales in service outlets were greater or less than in non-service outlets |
|---------------------------------|--|---|--|
| | Both credit and delivery service offered | Neither credit nor delivery service offered | |
| | Dollars | Dollars | Percent |
| Fruit and vegetable stores: | | | |
| All commodities | 313 | 204 | +53 |
| Fruits and vegetables | 281 | 198 | +42 |
| Independent groceries: | | | |
| All commodities | 567 | 340 | +67 |
| Fruits and vegetables | 126 | 69 | +83 |
| Chain groceries: | | | |
| All commodities | 891 | 2,641 | -66 |
| Fruits and vegetables | 167 | 290 | -33 |
| Meat markets: | | | |
| All commodities | 665 | 569 | +17 |
| Fruits and vegetables | 221 | 199 | +11 |
| Pushcart operators: | | | |
| Fruits and vegetables <u>1/</u> | 240 | 102 | +135 |
| Wagon or motor hucksters: | | | |
| Fruits and vegetables <u>1/</u> | 142 | --- | ---- |
| Average all types of outlets: | | | |
| All commodities | 530 | 239 | +122 |
| Fruits and vegetables | 186 | 138 | +35 |

1/ Sales of all commodities and of fruits and vegetables were identical in these types of outlets.
Source: Data obtained from chain stores and independent retailers in New York City.

If the foregoing data are representative of retail practices, it would seem that for independent outlets, delivery service must be a relatively more important sales factor than credit. For chain stores, neither credit nor delivery seems to have resulted in a large sales volume per store.

These data show that services vary greatly between types and within types of stores. They emphasize the difficulty of making direct comparisons between retail prices charged by each type.

VARIETIES OF APPLES HANDLED

Twenty-three distinct varieties of eastern apples, and four varieties of western apples were handled by these 1,543 retailers, in addition to unknown varieties sold as "windfalls," "cooking," "eating," etc.

Proportion of Sales and Spoilage

Eastern apples made up 93 percent of all apples sold, and the Greening variety alone accounted for almost 49 percent. Although 27 varieties were handled, only 9 varieties were sold in quantities equal to one percent or more (table 47). Six varieties (five eastern; Greening, Wealthy, Dutchess, Williams Red, and Early McIntosh; and one western, Gravenstein) constituted almost 86 percent of all sales.

Spoilage reported on eastern apples ranged from 10.4 pounds per hundred on the Baldwin and York varieties to no spoilage on Alexander, Winesap, and Delicious varieties. On western varieties, spoilage ranged from 4.4 pounds to 12.8 pounds per hundred, and was smallest on the Gravenstein which was handled in largest volume.

Among the 10 varieties of eastern apples sold in largest volume, the variety which sold at the highest average realized retail price was the Early McIntosh (4.2 cents per pound), with the Greening (which sold in greatest volume) second highest (3.8 cents per pound). The western apple which sold in largest volume (the Gravenstein) sold at a price per pound which was slightly lower than the average for all western varieties.

Varieties Handled by Different Types of Outlets

The largest number of varieties (or classifications) of apples was handled by the fruit and vegetable stores, and the smallest number by wagon or motor hucksters. Without exception, however, the largest proportion of each type of outlet handled the Greening variety. The Gravenstein was second in number of retailers selling, in all types of outlets except pushcart operators and wagon hucksters (table 48). Although only 5.9 percent of the total tonnage consisted

Table 47.- TOTAL QUANTITY SOLD WEEKLY AND AVERAGE REALIZED RETAIL SELLING PRICE, GROSS RETAIL MARGIN AND SPOILAGE INCURRED, FOR EACH VARIETY OF APPLES, AS REPORTED BY NEW YORK CITY RETAILERS, 1/ AUGUST 1939

| Variety | Quantity sold weekly | | Average spoilage per 100 pounds purchased | Average realized retail selling price per pound | Average gross retail margin | |
|--------------------------------|----------------------|------------------|---|---|-----------------------------|--|
| | Total | Percent of total | | | Per pound | Percent of realized retail price per pound |
| | | | | | | |
| | Pounds | Percent | Pounds | Cents | Cents | Percent |
| Eastern Apples: | | | | | | |
| Greening | 108,192 | 48.7 | 4.2 | 3.8 | 1.7 | 45 |
| Wealthy | 27,792 | 12.5 | 2.1 | 3.1 | 1.7 | 55 |
| Duchess | 16,272 | 7.3 | 2.6 | 3.1 | 1.6 | 52 |
| Williams Red | 15,816 | 7.1 | 4.4 | 3.2 | 1.5 | 47 |
| McIntosh (Early) | 9,304 | 4.2 | 3.5 | 4.2 | 2.0 | 48 |
| Wolf River | 4,434 | 2.0 | 3.5 | 3.5 | 1.6 | 46 |
| Transparent | 4,056 | 1.8 | 3.3 | 3.1 | 1.4 | 45 |
| Gravenstein | 3,216 | 1.4 | 3.0 | 3.4 | 1.7 | 50 |
| "Windfall" | 2,040 | 0.9 | 5.1 | 2.6 | 1.0 | 38 |
| "Cooking" | 1,872 | 0.8 | 1.5 | 2.4 | 1.0 | 42 |
| Twenty-Ounce | 1,776 | 0.8 | 2.9 | 3.2 | 1.8 | 56 |
| Starr | 1,728 | 0.8 | 1.9 | 3.4 | 1.8 | 53 |
| Coddling (Red) | 1,320 | 0.6 | 3.1 | 3.5 | 1.2 | 34 |
| Pippin | 864 | 0.4 | 6.6 | 4.1 | 1.7 | 41 |
| Alexander | 816 | 0.4 | 0.0 | 2.8 | 1.3 | 46 |
| New York State | 384 | 0.2 | 6.3 | 2.8 | 1.0 | 36 |
| Northern Spy | 336 | 0.2 | 5.7 | 5.1 | 2.5 | 49 |
| Stark | 192 | 0.1 | 9.4 | 4.1 | 1.5 | 37 |
| Baldwin | 144 | 0.1 | 10.4 | 5.1 | 2.8 | 55 |
| "Eating" | 144 | 0.1 | 5.6 | 4.3 | 1.5 | 35 |
| Newtown Pippin | 96 | 2/ | 4.2 | 3.5 | 0.9 | 26 |
| Crab | 84 | 2/ | 9.5 | 3.2 | 1.3 | 41 |
| Rome Beauty | 48 | 2/ | 4.2 | 3.8 | 2.6 | 68 |
| Winesap | 48 | 2/ | 0.0 | 5.0 | 1.9 | 38 |
| York | 48 | 2/ | 10.4 | 5.6 | 1.0 | 18 |
| Delicious | 24 | 2/ | 0.0 | 5.0 | 0.8 | 16 |
| Unknown | 5,368 | 2.4 | 9.1 | 2.8 | 0.2 | 43 |
| Total or average Eastern | 206,444 | 93.0 | 3.8 | 3.6 | 1.7 | 47 |
| Western Apples: | | | | | | |
| Gravenstein | 13,161 | 5.9 | 4.4 | 6.4 | 2.5 | 39 |
| Winesap | 1,709 | 0.8 | 10.8 | 7.4 | 2.3 | 31 |
| Newtown | 433 | 0.2 | 9.7 | 6.3 | 2.7 | 43 |
| Delicious | 143 | 0.1 | 7.7 | 7.2 | 2.1 | 29 |
| Washington | 86 | 2/ | 12.8 | 6.6 | 2.8 | 42 |
| Unknown | 44 | 2/ | 6.8 | 5.2 | 0.7 | 13 |
| Total or average Western | 15,596 | 7.0 | 5.3 | 6.5 | 2.4 | 37 |
| Total or average all varieties | 222,040 | 100.0 | 3.9 | 3.8 | 1.8 | 47 |

1/ Includes 418 fruit and vegetable stands; 406 independent grocery stores; 317 pushcart operators; 264 chain grocery stores; 75 wagon or motor hucksters; and 63 meat markets.

2/ Less than one-tenth of one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 48.-PROPORTION OF STORES HANDLING EACH VARIETY OF APPLE, AS REPORTED BY 1,543 RETAIL OUTLETS, NEW YORK CITY, AUGUST 1939

| Variety | Proportion of stores handling each variety, by type of store | | | | | | Total all retail outlets | |
|------------------|--|------------------|------------|-----------------|------------------------|-----------------------------|--------------------------|-------------------------|
| | 418 fruit and vegetable stores | | | Grocery stores | | | Number of stores | Percent of total stores |
| | Percent | 406 independents | 264 chains | 63 meat markets | 317 pushcart operators | 75 wagon or motor hucksters | | |
| Eastern Apples: | | | | | | | | |
| Alexander | -- | -- | -- | 2 | 1 | -- | 3 | 1/1 |
| Baldwin | -- | 1/1 | -- | -- | -- | -- | 1 | 1/1 |
| Coddling | 1 | -- | -- | 2 | -- | -- | 5 | 1/1 |
| "Cooking" | 1 | 1 | -- | 3 | 1/1 | -- | 9 | 1/1 |
| Crab | -- | -- | -- | -- | -- | -- | 2 | 1/1 |
| Delicious | -- | 1/3 | -- | -- | -- | -- | 1 | 1/1 |
| Duchess | 9 | 1/1 | -- | 5 | 3 | 7 | 38 | 1/1 |
| "Eating" | -- | 1/1 | -- | -- | -- | -- | 2 | 1/1 |
| Gravenstein | 1 | 46 | 1/1 | 2 | 1 | -- | 16 | 1/1 |
| Greening | 59 | 3 | 66 | 73 | 14 | 28 | 716 | 46 |
| McIntosh regular | 8 | -- | 4 | 8 | 1/1 | 4 | 64 | 4 |
| New York State | 1/1 | -- | -- | -- | 1/1 | -- | 3 | 1/1 |
| Newtown Pippin | -- | 1/1 | 1/1 | -- | -- | -- | 1 | 1/1 |
| Northern Spy | 1/1 | 1 | -- | -- | -- | -- | 3 | 1/1 |
| Pippin | 1/1 | -- | -- | -- | -- | -- | 9 | 1/1 |
| Rome Beauty | 1/1 | -- | -- | -- | -- | -- | 1 | 1/1 |
| Stark | 1/1 | -- | -- | -- | -- | -- | 2 | 1/1 |
| Starr | 1/1 | 1/1 | -- | -- | -- | -- | 4 | 1/1 |
| Transparent | 1 | -- | -- | -- | 1/2 | -- | 10 | 1 |
| Twenty-ounce | 12 | 1/1 | -- | -- | 1/2 | -- | 8 | 1 |
| Wealthy | 1/1 | 1/1 | 4 | 6 | 1/1 | 9 | 113 | 7 |
| Windfall | 1/1 | 1/1 | -- | 3 | 1/1 | 3 | 6 | 1/1 |
| Winesap | 6 | 4 | 1/1 | 5 | 5 | 3 | 1 | 1/1 |
| Williams Red | 4 | 2 | -- | 3 | 1 | 1 | 27 | 2 |
| Wolf River | 1/1 | -- | -- | -- | -- | -- | 1 | 1/1 |
| York | 2 | 2 | 1/1 | -- | 3 | 3 | 31 | 2 |
| Unknown Eastern | | | | | | | | |
| Western Apples: | | | | | | | | |
| Delicious | 1/1 | 1/1 | -- | -- | -- | -- | 3 | 1/1 |
| Gravenstein | 22 | 13 | 6 | 19 | 3 | 1 | 177 | 11 |
| Newtown | 1 | 1/1 | 1/1 | 2 | -- | -- | 9 | 1 |
| Winesap | 3 | 2 | 1/1 | 2 | 1/1 | -- | 35 | 2 |
| Washington | 1/1 | 1/1 | -- | 2 | -- | -- | 4 | 1/1 |
| Unknown Western | 1/1 | -- | -- | -- | -- | -- | 1 | 1/1 |

1/ Less than one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

of the Gravenstein variety, it was actually handled by 11 percent of the outlets. On the other hand, the Wealthy variety was handled by about 7 percent of the outlets, but accounted for 12.5 percent of the total tonnage. The Duchess variety was handled by only 4 percent of the outlets, but it accounted for 7.3 percent of the tonnage.

From the foregoing, it is obvious that many varieties sold during August are handicapped in the marketing process by reason of the fact that only a small proportion of the retail outlets carried them in stock. This may be interpreted as an indication that growers of such varieties may find it necessary to engage in greatly increased sales promotional activities if they are to obtain their share of the better apple business. It may also suggest that the unpopular varieties should be gradually eliminated, and that growers' efforts should be concentrated on the varieties which retailers handle most readily. As an illustration of possible trends, only five varieties were stocked by any appreciable number of chain or independent grocery stores, only 6 or 7 by pushcart operators, meat markets, and wagon or motor hucksters; and not more than 9 by independent fruit and vegetable stands. It is probable that retailers find it difficult enough to be informed concerning the merits of a small number of popular apple varieties.

SOURCES OF SUPPLY FOR APPLES

The Washington Street Market, on lower westside Manhattan was the most important source of supply for eastern apples to independent retailers during August 1939 - 27 percent of the independent retailers bought 40 percent of the total supply at that market. The Bronx Market was a fairly close second, and 31 percent of the independent outlets obtained 30 percent of the total supply at that market, (table 49). Only one percent of the tonnage was ordered by mail or telephone, and 5 percent was selected at the retail stores. According to these retailers, 96 out of 100 of them made personal selections of the eastern apples purchased during August 1939. Practices of each type of independent retailer varied widely.

For western apples, the Bronx Market was a more important source of supply (30 percent of total tonnage) than the Washington Street Market (26 percent). This is partially explained by the fact that retail outlets in the Bronx handled considerably larger average volumes of western apples per outlet than did outlets in other boroughs of New York City. 6/ Thirty-four percent of these independent retailers bought western apples on the Bronx Market, and

6/ For some reason medium and high income Jewish families are relatively heavy users of western apples. The fact that the Bronx contains a much larger proportion, relatively, of these Jewish families than any other borough, probably explains the large volume of western apple sales per outlet in that borough.

Table 49.-- SOURCE OF SUPPLY OF APPLES, BY TYPE OF OUTLET, AS REPORTED BY INDEPENDENT RETAILERS, NEW YORK CITY, AUGUST 1939

| How and where apples were purchased | Total or average, all outlets | | Proportion of purchases by each type of outlet | | | |
|-------------------------------------|-------------------------------|------------------|--|---------|-------------------------|-----------------------------------|
| | Quantity purchased | | Fruit and vegetable stores | | Meat markets, operators | |
| | Total weekly Pounds | Percent of total | Percent | Percent | Percent | Wagon or motor trucksters Percent |
| Eastern Apples: | | | | | | |
| Personal Selection | | | | | | |
| At own store | 8,248 | 5 | 10 | 10 | 2 | - |
| Washington St. Market | 73,152 | 40 | 27 | 34 | 59 | 33 |
| Wallabout Market | 10,744 | 6 | 10 | 8 | 1 | 7 |
| Harlem Market | 5,504 | 3 | 4 | 3 | 1 | 3 |
| Gansevoort Market | 1,176 | 1 | 2 | 1 | - | - |
| Bronx Market | 53,664 | 30 | 31 | 33 | 19 | 35 |
| Other markets | 20,484 | 11 | 11 | 8 | 16 | 21 |
| By telephone or mail | 2,496 | 1 | 1 | 3 | - | - |
| Unknown | 6,168 | 3 | 4 | 4 | 3 | 1 |
| Western Apples: | | | | | | |
| Personal Selection | | | | | | |
| At own store | 1,112 | 8 | 9 | 3 | 2 | - |
| Washington St. Market | 3,724 | 26 | 29 | 28 | 31 | - |
| Wallabout Market | 649 | 4 | 9 | 3 | 10 | - |
| Harlem Market | 253 | 2 | 4 | 2 | - | - |
| Gansevoort Market | 270 | 2 | 3 | 1 | 1 | - |
| Bronx Market | 4,272 | 30 | 34 | 33 | 49 | 100 |
| Other Markets | 2,079 | 15 | 6 | 12 | 51 | - |
| By telephone or mail | 176 | 1 | 2 | 1 | - | - |
| Unknown | 1,650 | 12 | 4 | 17 | 7 | - |

Source: Data obtained from chain stores and independent retailers in New York City.

29 percent at the Washington Street Market (table 49). Buying practices of each type of retailer likewise varied about as widely on western as on eastern apples.

The above data are related directly to the problems of cooperative associations, growers, and others who are seeking to "streamline" their distribution systems in the New York metropolitan area.

GRADES SOLD AND PRICES REALIZED

Space limitations permit grade and price information for only 2 of the 26 varieties of apples handled by these retail outlets. The variety of eastern apples sold in largest volume was the Greening. Where possible, grade designations were obtained from the original package. Where this was not possible, a statement as to grade purchased was obtained from the retailer. The grade purchased was reported as unknown for 65 percent of the Greening apples sold by these retailers; 27 percent was reported as of the U. S. No. 1 grade; 5 percent as U. S. No. 2 grade; and other "grades" each made up one percent or less (table 50). The relation of family income to grade sold and price realized was striking. In the lowest income areas 85 percent of the eastern apples were reported as "grade unknown" and sold at an average realized retail price of 3 cents per pound; in the highest income areas, 44 percent were so classified, and the average realized retail price was 4 cents per pound. The proportion of eastern Greening apples of the U. S. No. 1 grade reported sold in each income area rose from 4 percent in the lowest income area (at an average retail price of 4.3 cents per pound), to 48 percent in the highest income area (at an average retail price of 4.7 cents per pound).

The Gravenstein variety was the only western apple sold in substantial volume during August. Of the total tonnage of this variety 34 percent was reported as being U. S. Fancy grade; 33 percent as unknown grade; 17 percent as U. S. No. 1 grade; 5 percent as U. S. Extra Fancy; 4 percent as U. S. No. 2 grade; and 7 percent were classified as "poor." Here again, the effect of family income of customers on grades retailed was striking. In the lowest income areas, 89 percent of the tonnage was classified as "grade unknown" or "poor grade"; and only 11 percent was of the U. S. Fancy or Extra Fancy grade. In the highest income areas, only 20 percent of the tonnage was classified as "grade unknown"; 54 percent as U. S. No. 1 grade; and 26 percent as U. S. Fancy or Extra Fancy grade (table 51). The average realized retail price for the U. S. Fancy grade was 5.9 cents per pound in low income areas, and 7.0 cents per pound in highest income areas.

The foregoing data may be of interest to growers, sales departments of cooperatives, and others as a basis for roughly appraising the

Table 50.- Greening Apples: RELATION OF GRADES AND PRICES TO QUANTITIES OF EASTERN APPLS OF THE GREENING VARIETY SOLD IN VARIOUS INCOME AREAS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Grade sold | Total quantities sold weekly and proportions of each grade sold by income area ^{1/} | | | | | | | | | |
|--|--|------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|
| | All income areas | | Low income | | Medium-low income | | Medium-high income | | High income | |
| | Quantity sold weekly | Percent of total | Quantity sold weekly | Percent of total | Quantity sold weekly | Percent of total | Quantity sold weekly | Percent of total | Quantity sold weekly | Percent of total |
| | Pounds | Percent | Pounds | Percent | Pounds | Percent | Pounds | Percent | Pounds | Percent |
| U. S. Fancy | 16 | 2/ | --- | --- | 16 | 1 | --- | --- | --- | --- |
| U. S. No. 1 | 28,816 | 27 | 555 | 4 | 3,232 | 14 | 4,608 | 16 | 20,424 | 48 |
| U. S. No. 2 | 5,544 | 5 | --- | --- | 2,736 | 11 | 336 | 1 | 2,472 | 6 |
| U. S. Commercial | 1,096 | 1 | 432 | 3 | 664 | 3 | --- | --- | --- | --- |
| U. S. Combination | 960 | 1 | 960 | 8 | --- | --- | --- | --- | --- | --- |
| Ungraded | 960 | 1 | --- | --- | --- | --- | 96 | 2/ | 864 | 2 |
| Grade unknown | 70,800 | 65 | 11,100 | 85 | 16,524 | 71 | 24,144 | 85 | 19,032 | 44 |
| Average realized retail prices and margins, by income area ^{1/} | | | | | | | | | | |
| | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin |
| U. S. Fancy | 5.0 | 0.6 | --- | --- | 5.0 | 0.6 | --- | --- | --- | --- |
| U. S. No. 1 | 4.5 | 2.1 | 4.3 | 1.8 | 4.0 | 1.5 | 4.1 | 2.0 | 4.7 | 2.3 |
| U. S. No. 2 | 3.3 | 1.6 | --- | --- | 2.7 | 1.5 | 3.5 | 1.5 | 3.9 | 1.6 |
| U. S. Commercial | 3.8 | 1.4 | 3.0 | 0.6 | 4.4 | 2.0 | --- | --- | --- | --- |
| U. S. Combination | 3.7 | 2.0 | 3.7 | 2.0 | --- | --- | --- | --- | --- | --- |
| Ungraded | 4.3 | 1.9 | --- | --- | --- | --- | 3.0 | 2.0 | 4.4 | 1.8 |
| Grade unknown | 3.6 | 1.6 | 3.0 | 1.4 | 3.5 | 1.4 | 3.7 | 1.7 | 4.0 | 1.9 |

^{1/} For explanation of income areas, see table 5, page 11.

^{2/} Less than one percent.

Source: Data obtained from chain stores and independent retailers in New York City.

Table 51.-- Gravenstein Apples: RELATION OF GRADES AND PRICES TO QUANTITIES OF WESTERN APPLES OF THE GRAVENSTEIN VARIETY SOLD IN VARIOUS INCOME AREAS, AS REPORTED BY NEW YORK CITY RETAILERS, AUGUST 1939

| Total quantities sold weekly and proportions of each grade sold by income area ^{1/} | | | | | | | | | | | | | | |
|--|----------------------|------------------|--------------|----------------------|------------------|--------------|----------------------|------------------|--------------|----------------------|------------------|--------------|----------------------|------------------|
| Grade sold | All income areas | | | Low income | | | Medium-low income | | | Medium-high income | | | High income | |
| | Quantity sold weekly | Percent of total | Pounds | Quantity sold weekly | Percent of total | Pounds | Quantity sold weekly | Percent of total | Pounds | Quantity sold weekly | Percent of total | Pounds | Quantity sold weekly | Percent of total |
| | Pounds | Percent | | Pounds | Percent | | Pounds | Percent | | Pounds | Percent | | Pounds | Percent |
| U. S. Extra Fancy | 627 | 5 | 66 | 2 | 4 | 77 | 176 | 6 | 308 | 8 | | | | |
| U. S. Fancy | 4,443 | 34 | 345 | 9 | 39 | 858 | 2,492 | 81 | 748 | 18 | | | | |
| U. S. No. 1 | 2,299 | 17 | --- | --- | 5 | 110 | --- | --- | 2,189 | 54 | | | | |
| U. S. No. 2 | 616 | 4 | --- | --- | 28 | 616 | --- | --- | --- | --- | | | | |
| Poor 2/ | 880 | 7 | 880 | 23 | --- | --- | --- | --- | --- | --- | | | | |
| Grade unknown | 4,316 | 33 | 2,563 | 66 | 24 | 528 | 396 | 13 | 829 | 20 | | | | |
| Average realized retail prices and margins, by income area ^{1/} | | | | | | | | | | | | | | |
| | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin | Retail price | Gross margin |
| All figures are in cents per pound | | | | | | | | | | | | | | |
| U. S. Extra Fancy | 6.4 | 2.3 | 6.2 | 2.6 | 6.5 | 2.6 | 6.0 | 1.6 | 6.7 | 2.6 | | | | |
| U. S. Fancy | 6.8 | 2.9 | 5.9 | 2.0 | 7.2 | 3.3 | 6.7 | 2.7 | 7.0 | 3.2 | | | | |
| U. S. No. 1 | 8.1 | 3.6 | --- | --- | 7.6 | 1.8 | --- | --- | 8.1 | 3.6 | | | | |
| U. S. No. 2 | 6.1 | 1.6 | --- | --- | 6.1 | 1.6 | --- | --- | --- | --- | | | | |
| Poor 2/ | 2.7 | -0.1 | 2.7 | -0.1 | --- | --- | --- | --- | --- | --- | | | | |
| Grade unknown | 5.8 | 2.0 | 5.1 | 1.6 | 7.1 | 3.5 | 5.4 | 2.0 | 7.4 | 2.6 | | | | |

^{1/} For explanation of income areas, see table 5, page 11.

^{2/} Grade designated by retailer.

Source: Data obtained from chain stores and independent retailers in New York City.

grades for which consumers in various income groups may be able and willing to pay, and the approximate differences in retail price levels which may be necessary to induce each group to buy.

NUMBER OF ITEMS HANDLED AND FRUIT SALES

As was pointed out in a previous report, 1/ growers, sales departments of cooperative associations, and others often fail to understand why retailers seem to be unfamiliar with the virtues of their particular fruit, and appear to be unwilling to concentrate on selling it. This lack of understanding is due partially to failure to appreciate the small-unit, wide-variety buying habits of consumers in general, and the consequent need on the part of the retailer for stocking a large number of commodities to satisfy consumer trade.

Each fruit in the final analysis is just one more item. The number of items which retailers carry in stock depends on many factors, chief of which are probably the type of outlet and the average income of the families living in the vicinity of the retail outlet.

During August 1939, the average number of items carried by chain grocery stores was 874; by independent grocery stores, 448; by meat markets, 122; by fruit and vegetable stores, 55; by wagon or motor hucksters, 11; and by pushcart operators, 10 (table 52). The number of items carried by pushcart operators and hucksters did not vary greatly by income areas, and meat markets handled more items per store in the lower income areas than in the higher. In the case of grocery stores, the items carried per store was much more numerous in high than in low income areas, and this was also true of fruit and vegetable stores (table 52).

The implications inherent in these data can hardly be over-emphasized. Even casual observation of retailing practice makes it clear that cooperative associations, growers, and others should not expect retailers of their own volition to be fully informed, enthusiastic salesmen for their products. It is doubtful whether any clerk can know the merits of even 90 items in a high-income fruit and vegetable store, let alone some 1,000 items in a chain grocery store in a similar area. It is a matter of common observation that retailers push those items on which they are afforded sales helps and which they consider reasonably profitable. If retailers and their clerks are to become enthusiastic and well-informed salesmen of any one fruit, it seems likely that some group must prepare attractive sales programs and display material, and induce retailers to use them. Wholesalers and jobbers, each with wide lines of produce to merchandise, cannot logically be expected to concentrate sales efforts on a single product. If the job is to be done, it

1/ Miscellaneous Report No. 19, Farm Credit Administration, August 1939, page 37.

will probably have to be conceived and carried out by groups of growers (cooperatively or otherwise), and directed primarily at the consumers' main source of supplies; that is, the retailer.

Table 52.- RELATION OF TYPE OF RETAIL OUTLET AND INCOME AREA TO NUMBER OF ITEMS HANDLED PER OUTLET, AS REPORTED BY 1,543 RETAILERS, NEW YORK CITY, AUGUST 1939

| Type of retail outlet | Average number of items handled per retail outlet in each income area <u>1/</u> | | | | |
|----------------------------|---|-------------------|--------------------|-------------|-------------------|
| | Low income | Medium-low income | Medium-high income | High income | Average all areas |
| Fruit and vegetable stores | 27 | 51 | 57 | 90 | 55 |
| Grocery stores: | | | | | |
| Independents | 240 | 386 | 479 | 657 | 448 |
| Chains | 656 | 704 | 847 | 999 | 874 |
| Meat markets | 146 | 134 | 104 | 119 | 122 |
| Pushcart operators | 10 | 10 | 11 | 10 | 10 |
| Wagon or motor hucksters | 10 | 11 | 12 | 11 | 11 |

1/ For explanation of income areas, see table 5, page 11.

Source: Data obtained from chain stores and independent retailers in New York City.

